Saturday Review

OCTOBER 5, 1957 / 25¢

Property of
AMBASSADOR COLLEGE LIBRARY
BIG SPRING, Texas

PRINCE PHILIP, SCIENCE AMBASSADOR FOR THE QUEEN

by John Lear

SR/RESEARCH
SCIENCE & HUMANITY

-SR6381 9KK6J7
MARTHA ALY
BOX 215
KEMAH TEXAS

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

For less than a go on a merry-go-round

YOU CAN STILL BUY A POUND OF STEEL

Even at the bargain rate of 3 rides for a quarter —steel is the bigger bargain! Basic steel costs only about 7¢ a pound. Compare it, pound for pound, with anything else you buy.

Only by keeping steel plentiful can the industry continue to sell it at such a bargain price. And this is important to you—to everyone—because every product you use is made from steel or with the help of steel.

This is why Republic, as one of the three largest producers, is expanding its steelmaking facilities. When you come right down to it, plentiful, low cost steel is the pivot around which our dynamic prosperity revolves.

Since it is essential to everyone, thinking people, especially, need to know the facts about steel prices, steel production and the requirement for proper expansion of America's steel industry to assure maximum national defense and the continuance of a rising standard of living.

REPUBLIC STEEL General Offices, Cleveland 1, Ohio

WORLD'S WIDEST RANGE OF STANDARD STEELS AND STEEL PRODUCTS

THE FLYING HORSE on the merry-go-round is supported by safe, strong steel pipe . . . the same type of steel pipe that carries water into and through your home. Steel pipe costs least, lasts long. Republic is a major producer of steel pipe for all purposes.

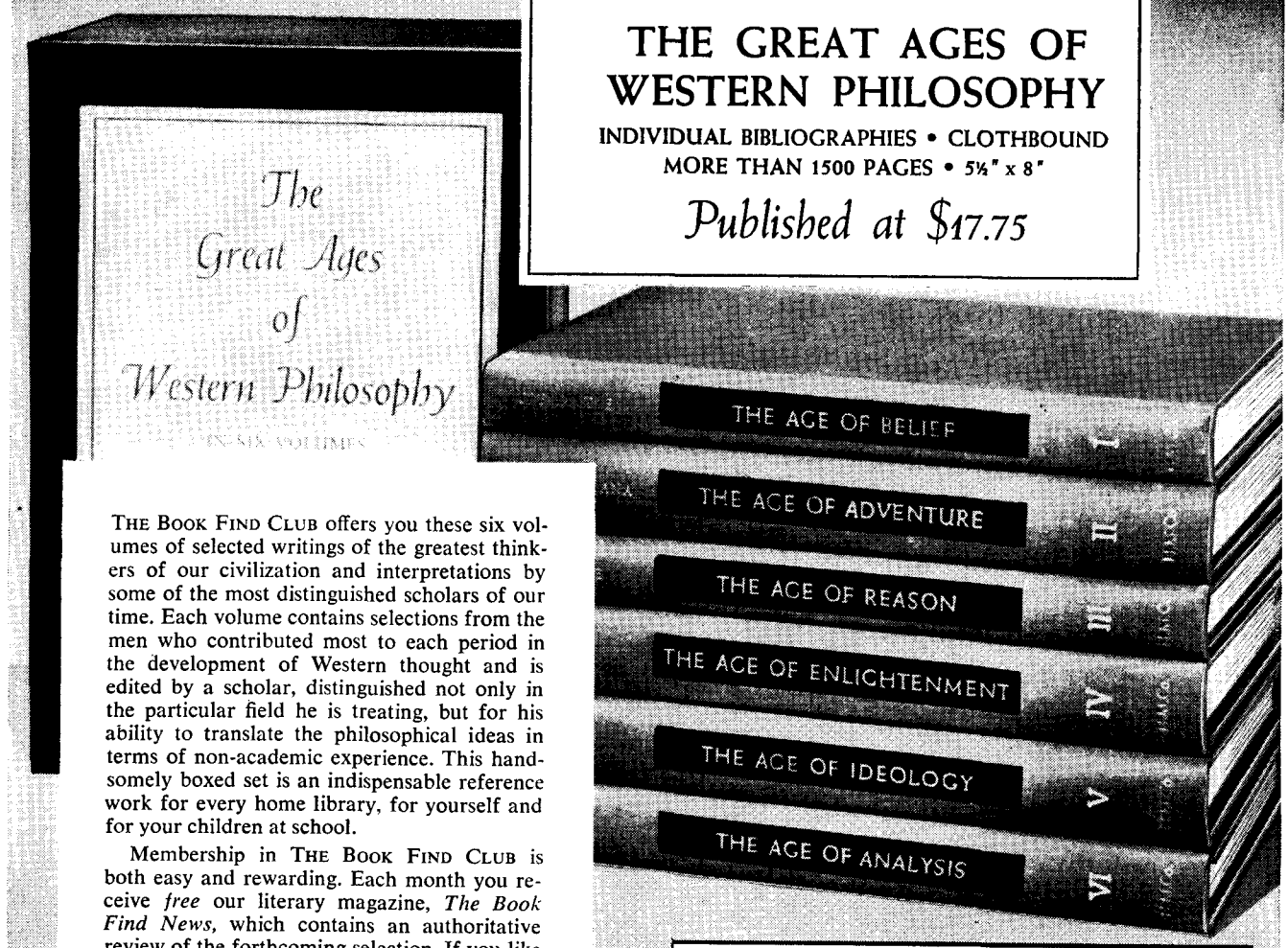
PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Property of
AMBASSADOR COLLEGE LIBRARY
Big Sandy, Texas

YOURS FREE...

with membership in THE BOOK FIND CLUB

This handsomely boxed 6-volume library edition



THE GREAT AGES OF WESTERN PHILOSOPHY

INDIVIDUAL BIBLIOGRAPHIES • CLOTHBOUND
MORE THAN 1500 PAGES • 5¼" x 8"

Published at $17.75

THE BOOK FIND CLUB offers you these six volumes of selected writings of the greatest thinkers of our civilization and interpretations by some of the most distinguished scholars of our time. Each volume contains selections from the men who contributed most to each period in the development of Western thought and is edited by a scholar, distinguished not only in the particular field he is treating, but for his ability to translate the philosophical ideas in terms of non-academic experience. This handsomely boxed set is an indispensable reference work for every home library, for yourself and for your children at school.

Membership in THE BOOK FIND CLUB is both easy and rewarding. Each month you receive *free* our literary magazine, *The Book Find News*, which contains an authoritative review of the forthcoming selection. If you like it, you need do nothing, it will arrive automatically; if not, simply return a form saying, "Send me nothing." Or, you may choose from a list of over 100 current books, all available at special membership savings. And, under the *Book Find Bonus Plan*, you receive one *free* book for each four purchases.

Begin your membership now by accepting your free set of THE GREAT AGES OF WESTERN PHILOSOPHY plus your choice of one of the important books as your first selection at special members' price.

THE BOOK FIND CLUB, 215 Fourth Ave., New York 3, N. Y.

Please enroll me as a member and send me, Free, the six-volume set, *The Great Ages of Western Philosophy*, along with the book I have chosen as my first selection at the members' price plus 24¢ postage and handling. I am to receive free the monthly *Book Find News*. I agree to buy at least 3 additional books during my first year of membership, and I am to receive a *Bonus Book* for each four purchases. I may cancel my membership without obligation at any time thereafter.

Begin my membership with the selection noted below.

	Pub. at	Members' price
☐ **COMPULSION** by Meyer Levin	$5.00	$3.50
☐ **THE TOWN** by William Faulkner	3.95	2.50
☐ **BERNARD SHAW** by St. John Ervine	7.50	3.95
☐ **FURTHER FABLES FOR OUR TIME** by James Thurber	5.00	2.95
☐ **BRIDGEHEAD** by Waldo Frank	3.75	2.95
☐ **THE YOKE AND THE ARROWS** by Herbert L. Matthews	3.75	2.95
☐ Dual Selection: **MEMORIES OF A CATHOLIC GIRLHOOD** by Mary McCarthy and **THE HIDDEN PERSUADERS** by Vance Packard	7.95	4.50

Name_____
Please print

Address_____

City_____ Zone____ State_____

(Same price in Canada: Address 105 Bond St., Toronto 2, Canada) **SR 10-5**

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

You travel light with an Olivetti Lettera 22, the portable portable. Carry it in its distinctive case; or slip it into a suitcase; it is slim. Discover how beautifully it types (and note that it has all the important big-typewriter features) at your Olivetti dealer. $88 plus tax. Price includes the travel case.

olivetti

The Olivetti Studio 44 is a somewhat larger portable. It has the feel and features of a standard; type on it blindfolded and we think you'll mistake it for one. $115 plus tax, with case. For names of dealers near you, write Olivetti Corporation of America, 580 Fifth Avenue, New York 36, N. Y.

The Saturday Review

OCTOBER 5, 1957

Cover Photograph: British Broadcasting Corp.

SR/IDEAS

8 On the Morality of Space, by Arthur C. Clarke
19 How Powerful Are the Persuaders? by Elmo Roper
20 Smudging the Subconscious: An Editorial
39 Prince Philip, Science Ambassador for the Queen, by John Lear

SR/BOOKS

11 The Vanishing Hero, by Sean O'Faolain
Reviewed by Donald Barr
12 The English Common Reader, by Richard D. Altick
Reviewed by John T. Winterich
13 Emergence From Chaos, by Stuart Holroyd
Reviewed by William Bittner
14 Why I Am Not a Christian, by Bertrand Russell
Reviewed by Brand Blanshard
15 Diderot: The Testing Years, by Arthur M. Wilson
Reviewed by J. Salwyn Schapiro
17 Bumper Crop of Novels: New Books by Paul Horgan, Walter Macken, Thomas Costain, Graham Greene, Clyde Brion Davis, Jay Deiss, Natsume Soseki, William Woods, Hollis Summers, Frances Faviell, Stuart Cloete, Al Morgan
30 Mahatma: Life of Mohandas Karamchand Gandhi, by D. G. Tendulkar
Reviewed by Anand Lall
31 The Transfer of Power in India, by V. P. Menon
Reviewed by William Clifford
32 The Face of Justice, by Caryl Chessman
Reviewed by Frank O'Leary

SR/DEPARTMENTS

5 Trade Winds
21 Letters to the Editors
22 Broadway Postscript
23 *SR* Goes to the Movies
24 TV and Radio
25 Music to My Ears
26 The Fine Arts
27 Literary I.Q.
28 Booked for Travel
36 Literary Crypt
39 SR/Research for October
51 Kingsley Double-Crostic No. 1228

The SATURDAY REVIEW, published weekly by Saturday Review, Inc., 25 W. 45th Street, New York 36, N. Y. Harrison Smith, President; J. R. Cominsky, Publisher, Executive Vice President and Treasurer; Norman Cousins, Vice President; Nathan Cohn, Assistant Treasurer and Business Manager; Robert A. Burghardt, Advertising Director; Bert Garmise, Circulation Director; Ray Goodman, Circulation Manager; Marion Urmy, Assistant to the Publisher. Subscription $7 a year; $8 in Canada. Member Adult Bureau of Circulation. Vol. XL, No. 40, Oct. 5, 1957. Re-entered as second-class matter January 11, 1952 at the Post Office in New York, N. Y., with additional entry at Philadelphia, Pa., under the act of March 3, 1879. Indexed in the "Readers Guide to Periodical Literature."
© 1957 by Saturday Review, Inc. All rights reserved under Berne and Pan-American Copyright Conventions. Reproduction in whole or in part of any article without permission is prohibited. Printed in the United States of America.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TRADE Winds

"SAN FRANCISCO," said one exuberant visitor, "is a place where you turn the corner, and the world changes."

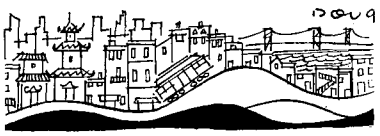
"San Francisco," said another, "is a warm Philadelphia with a New York accent."

"San Francisco," said a third, "is where you don't see much except a lot of water and rock. I'm in Alcatraz."

"San Francisco," said a gentleman at the Top of the Mark, "is where even the slums look good."

"San Francisco," said a cynic, "is getting too much like L.A. It's where neon goes when it dies."

"San Francisco," said Sue Lorenz, the United stewardess on the flight



out, "is a place to hang your hat for a day and a half until the trip back East. But what a hatrack!"

"San Francisco," said Flight Captain Reynolds of the same craft, "is the only damn place in the world to live."

YOU MIGHT CALL the lower part of Telegraph Hill—and its adjoining North Beach district—the Greenwich Village of San Francisco. A Saturday evening among the Bohemians there—real and pseudo—might find you squeezed on the floor of an eight-by-fourteen living room with just enough room to balance a warmish bourbon-and-water on your knees (for the ice is bound to have run low). You'd be sure to see a couple of girls with black sweaters, black skirts, black knee socks, and bright outlooks—and at least three beards poking up over an equal number of tweed jackets. The talk will range from Picasso to Dali to Bartok to Dylan Thomas to Allen Ginsberg's poem "Howl," which has been rocking both the city and the country along with the now-famous trial. It is a case of provincial stupidity on the part of a customs inspector, a rectangular mayor, and a prosecuting attorney who should know better.

THE TRIAL ITSELF has been branded by some as a deliberate political gambit to save the face of Customs Official Chester McFee. McFee made the strategic error of holding up the copies of the poem "Howl," being shipped from England (where it was originally published with a few other Ginsberg poems) to bookseller and poet Lawrence Ferlinghetti, who was planning to publish it in this country. McFee forwarded the poem to Washington on the grounds that the material therein was obscene. But Washington failed to find it such, and refused to bar it on the grounds of obscenity. The local politicians refused to let it go at that, and arrested Ferlinghetti and his assistant, Shigeyoshi Murao, who now face a possible $500 fine and six months in jail on the charge of knowingly offering an obscene book for sale. McFee's error lies in the fact that the trial has boomeranged completely at this point, and the poem is receiving many times the attention it would have received. It is obviously a very serious effort and must be judged, according to Federal law, as a whole—not censored on the grounds of individual words in it. The local prosecution cannot hope to win in the face of the already-made Federal decision.

FERLINGHETTI can be considered a part of the nebulous group which has become known as exponents of what is being called the San Francisco Renaissance (see book review on page 13) . . . the New Generation of Revolt . . . the Beat Generation . . . or various other combinations of phrases. In an effort to track down more of what this is all about we called first on its most articulate spokesman, Kenneth Rexroth. We found him at his Scott Street apartment in high spirits, surrounded by tons of books and a charming baby daughter's birthday party.

"The thing that makes San Francisco what it is from the creative

artist's viewpoint is that it's a far cry from the gossiping marketplace in New York. Writers can think about life and meet it on its own terms in an atmosphere of tolerance and enthusiasm. The Ginsberg trial is a freak anomaly—the city people have been cordial to creative imagination ever since the days of the Gold Rush. There is no cultural provincialism among the San Francisco group. They mainly come from other parts of the

the most
SIGNIFICANT
books of the year

MILOVAN DJILAS
The New Class
AN ANALYSIS of the COMMUNIST SYSTEM

The book that is rocking the Communist world! Front-page news throughout the West banned in Yugoslavia and denounced in Moscow; 27 translations are underway around the globe. The most widely discussed political book of our time. *$3.95*

IMRE NAGY
On Communism
IN DEFENSE of the NEW COURSE

Another key document! The Premier-of-a-week in revolution-torn Hungary, and now a Soviet prisoner, Nagy wrote this when he was out of office. A secret report to the Central Committee, it is a dialectical defense of his liberalizing program and a scathing attack on the Communist leadership. This book was smuggled out of Hungary. *$5.00*

COMING IN NOVEMBER

HOWARD FAST
The Naked God
THE WRITER and the COMMUNIST PARTY

Mr. Fast's own story of his break with Communism. A personal narrative and a book about people, it explains clearly and very movingly *why* writers the world over turn to Communism and *why,* in the end, they must turn from it and from the shackles of party dogma. This is not an exposé, but rather an explanation of how human values inevitably destroy party allegiances.

BOOKS THAT MATTER

FREDERICK A. PRAEGER INC.
15 WEST 47th STREET · NEW YORK 36

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The more you know about Scotch,

the more you like

Ballantine's

"21" Brands, Inc., N.Y.C. 86 PROOF

ALSO IMPORTERS OF 94.4 PROOF **BALLANTINE'S DISTILLED LONDON DRY GIN** DISTILLED FROM GRAIN

After Utopia

THE DECLINE OF POLITICAL FAITH

By JUDITH N. SHKLAR

Why has the political optimism and utopian thinking of the Enlightenment given way to the cultural despair of today? Though fatalism may be unavoidable at present, is it inevitable? How and where can the modern world begin to build a new, vigorous political philosophy? Here is the problem and the challenge of the 20th century—topics handled brilliantly in this delightfully controversial book. $5.00

Order from your bookstore or

PRINCETON UNIVERSITY PRESS
Princeton, New Jersey

RICHARD ARMOUR, a Lamb-in-Bard's-clothing gambols through six great plays in

Twisted Tales from Shakespeare

The man who dug up the funny bones of history in IT ALL STARTED WITH COLUMBUS, *now turns to high drama and parodies Shakespeare's works with uninhibited good humor. 62 line drawings by Campbell Grant add to the fun. $2.95, now at your bookstore.*

A McGRAW-HILL BOOK

country. Ginsberg is from New Jersey. Kerouac from Massachusetts. Ferlinghetti from both New York and the Continent, to name some. They find here a close contact with life . . . and a responsive audience from all classes of people."

Rexroth seems to prove out his own theories by developing a new concept of jazz-and-poetry sessions, where he reads his own poetry to the beat of a solid combo and appreciative audiences. He is a supporter of The Poetry Center, which, under the energetic guidance of Ruth Witt-Diamant and Ida G. Hodes, has staged and continues to stage readings by such poets as Marianne Moore, W. H. Auden, Malcolm Cowley, Theodore Roethke, Allen Tate, Dylan Thomas . . . and many others.

BEFORE LEAVING New York for the Coast we talked to Jack Kerouac, author of the new novel "On the Road," mentioned briefly in this column last week. Kerouac is a peripatetic member of the San Francisco group, a slight, intense young man who is convinced that you've got to embrace life completely if you want to dig it.

"I guess I was the one who named us the 'Beat Generation'," he said. "This includes anyone from fifteen to fifty-five who digs *everything*, man. We're not Bohemians, remember. Beat means beatitude, not beat up. You *feel* this. You feel it in a beat—in jazz—real cool jazz or a good gutty rock number."

He demonstrated this with a fully acceptable hand-drumming exhibition on the table in his hotel room.

"The Beat Generation loves everything, man. We go around digging everything. Everything means something. Everything's a symbol. We're mystics. No question about it. Mystics."

Kerouac has bummed his way back and forth across the country a half a dozen times. "On the Road" is based mainly on these experiences. He wrote the book on a continuous scroll of mechanical drawing paper, banged out on a typewriter in single space with no paragraphs whatever. He showed us the scroll—started nearly ten years ago, about a foot in diameter, and looking a little as if it were one of the originals from the Dead Sea. We had to leave before we could find out from Kerouac just how he was able to go about digging life with full emotional abandon—while still fostering the discipline to turn out the thousands and thousands of words a novelist must produce.

WE HAD PLANNED to meet Lawrence Ferlinghetti at the Coexistance Bagel

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Shop (sic) at the corner of Grant and Green Streets, but we arrived too late. This coffee house has the flavor of Greenwich Village . . . where you can get a corned beef sandwich, an apple strudel, beer, and all the cerebral conversation you want, and still get change back from a dollar. We traced him to his apartment, half way up Telegraph Hill, where the view of the Bay was equalled only by the striking originality of his abstract paintings.

Ferlinghetti and his wife Kirby are alert, intelligent, gracious people. They are treating the trial with a light touch, but underneath it they feel that it is, in a degree, like the Arkansas case. When the Federal Law is applied the local law must give way. His first reaction on being arrested was the notion: This is how San Francisco officially recognizes what has been heralded nationally as a Renaissance in modern poetry. But he feels with others that the battle for literary freedom will be won, and the case for honest literature will be strengthened.

Actually, Ferlinghetti himself was not in town when the warrants were served. Kirby was calmly sweeping out the City Lights Pocket Bookshop, as the store is known, when two plainclothesmen arrived with the warrants.

"They were terribly nice, really," she said. "I would have sworn they were just out of Yale. They said it was all in the line of duty, ma'am, and I guess I got a little emotional about the whole thing and told them there were a lot more obscene things in books you can buy every day at any bookshop. I think they might have been just a little embarrassed about the whole thing."

As this is being written the trial has not been decided. Whatever the outcome, the attitude of a few local politicians should in no way reflect on the attitude of San Francisco as a whole.

It's a city fired with imagination and energy and vitality.

It will far outrun the almost Gilbert and Sullivan aspect of the present comedy of errors.

—JOHN G. FULLER.

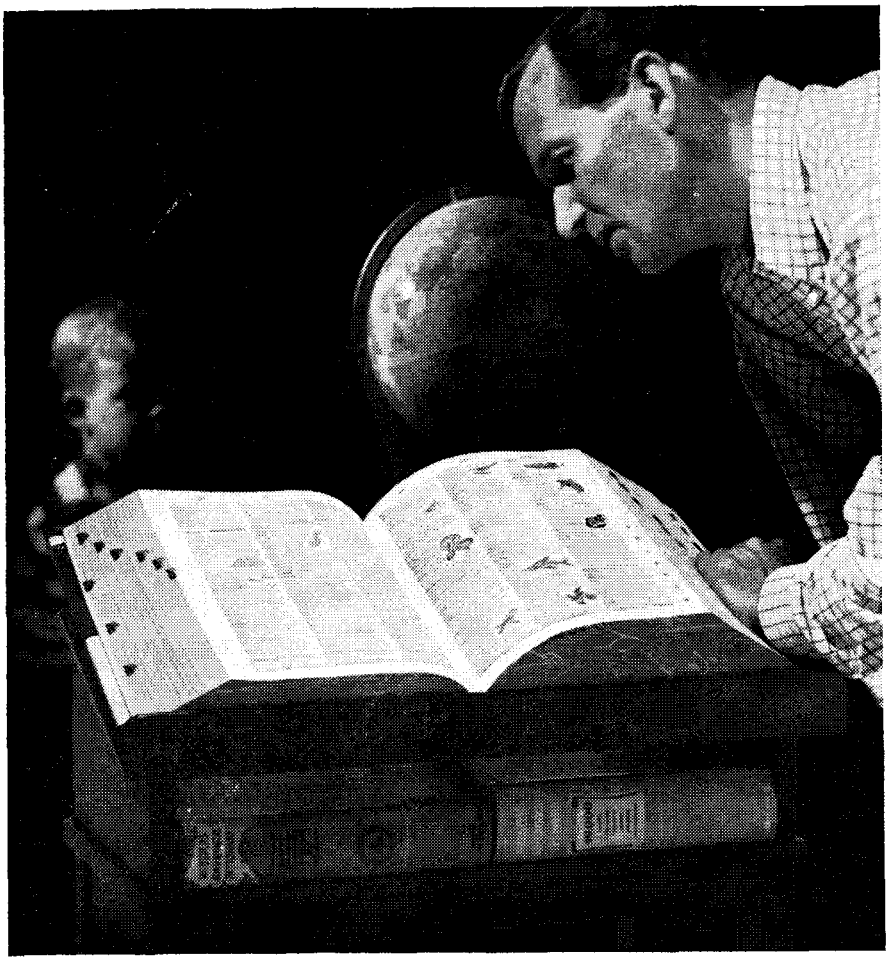
SOLUTION OF LAST WEEK'S KINGSLEY DOUBLE-CROSTIC (No. 1227)

C. W. COLE:

(AMERICAN) YOUTH GOES MONOGAMOUS

(From *Harper's*)

Youth today is almost completely monogamous, and is aggressively sure that its ways are right. . . . The oddest thing about this revolution is that it constitutes the triumph of rural nineteenth-century American mores.



THE WORLD'S GREATEST INFORMATION CENTER in your own home...for only $39.50

In school work or business or current events, every member of your family has questions that may go unanswered if finding the answer takes too much time or is inconvenient.

That is why thousands of families like yours value Webster's New International Dictionary as the great question answerer, an "information center" so informative and intriguing that someone in the family will turn to it nearly every day. In this single volume, costing only $39.50, there is accurate information on literally every subject known to man. It is equivalent in printed material to an 18-volume encyclopedia—yet it is always open and inviting use, rather than buried in a bookcase.

As your family develops the "look it up" habit, their daily questions will be answered with complete accuracy, for the New International is relied on for information by our schools and libraries and is recognized as "the Supreme Authority" of the English-speaking world.

Spend a few minutes examining this famous Merriam-Webster at your department, book, or stationery store. We are sure that its 3,350 pages (and more than 600,000 entries!) will convince you that here is a wonderful investment for your family and yourself. G. & C. Merriam Co., Springfield, Mass.

WARNING: Webster's New International Dictionary is never available as a premium in any "free" offers. Don't be misled by "big" dictionaries you may assume to be unabridged.

Insist on a genuine Merriam-Webster. Look for the trademark.

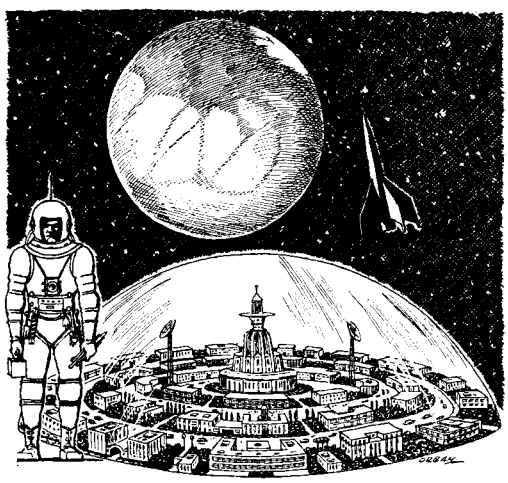
A Merriam-Webster
Reg. U.S. Pat. Off.

WEBSTER'S NEW INTERNATIONAL DICTIONARY
SECOND EDITION

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Saturday Review
OCTOBER 5, 1957

ON THE MORALITY OF SPACE



Some day, when the space-satellite is past history, and the latest reports from the Moonbase have been relegated to page 21 of the newspaper, an expedition will set off for our friendliest neighbor—Mars. Here men will walk on a dismal, dreary desert, a smallish planet where a 200-pound man will weigh but seventy pounds and where the year is 687 Earth-days long. But at Mars's poles we have detected ice; and there is an atmosphere, though not one rich enough in oxygen to enable a man to walk around without an oxygen mask; and in summer the temperature reaches 70 degrees. Real life grows there, too: probably a lichen-like vegetable. Given the limitless resources of thermonuclear engines, human society can be sustained there—possibly inside vast pressure domes such as the one drawn at right (at the top of this sketch we have added an idea of Mars's appearance in the telescope). What this first colonization can contribute to the imagination and vitality of civilization is discussed for SR *by Arthur C. Clarke, scientist and author, globetrotting skindiver and explorer, past president of the British Interplanetary Society.*

By ARTHUR C. CLARKE

EVERY great scientific development has profound effects upon humanity's culture, its philosophical beliefs, and its religions. The works of Copernicus, Darwin, Freud, and Einstein are the classic examples of this. Each was a scientist concerned primarily with the pursuit of truth, and each changed the shape of the world almost out of recognition. We are still living in the revolution wrought by the last two, without much certainty that we will survive it. Yet another change is now almost upon us—a change which, in some ways, may be more shattering than all the intellectual upheavals of the past.

Every educated man now knows that, at some time in the not-too-distant future, the exploration of interplanetary space will begin in earnest. To some extent it has already started. Rockets are now in existence capable of carrying substantial loads to heights of several thousand miles, and the Earth Satellite Program will establish, a few months from now, our first permanent foothold in space. Beyond that, the head of the Air Force's Western Development Division—which has already spent about twice as much on the ICBMs as the Manhattan Project spent on the atom bomb—has stated flatly that we now have the know-how to hit the Moon. The general feeling among the engineers and scientists who are actually engaged on rocket research (and are the only people competent to pass an opinion) is that a landing on the Moon will take place before the end of this century. Some would put it at less than thirty years from now; as close, in other words, as Lindbergh's crossing of the Atlantic.

When space-flight begins is quite unimportant compared to its effects. The physical exploration of the Earth, the opening-up of new terrestrial continents, will seem trivial by comparison. We have to go back a billion years or more to find an event of equal significance; that was the moment, halfway back to the beginning of the world, when life came out of the ancestral sea and commenced the conquest of the land. But, if in a few centuries hence it will not matter whether the date of the first lunar landing is 1977 or 1997—or even, perhaps, whether the first man to set foot on our satellite was Russian or American—it would be unrealistic to pretend that there is no danger at all of carrying our present rivalries into space. Already General Schriever, when he is not busily acting as midwife to TITAN and ATLAS, is talking about the problem of obtaining space supremacy for the United States. As a general that's his job. But as a representative of *homo sapiens* he must sometimes wonder.

YET there are hopeful signs, of which the quiet acceptance of the

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Earth Satellite Program is one. Many prophets of space-flight (perhaps not least myself, in what *Partisan Review* recently referred to as my "favorite role of elder statesman") have been optimistic enough to hope that the overall experience will be salutary. When we can see our world in its true perspective, spinning like a moth around the solar flame that will one day consume it, we may be less conscious of our present tribal divisions, less acutely aware of the importance of this disputed frontier, that unclaimed island. No nation in the world has complained about the intended passage of foreign space-vehicles across its borders: responsible opinion has already agreed that it is absurd to think of territorial rights as extending 300 or more miles above the Earth. Perhaps the fact that the American satellites will graze southern Russia, and the Russian satellites will pass over the entire United States, may explain the acquiescence of the main parties involved.

HOWEVER disappointing it may be in other respects, it is probably fortunate that none of our neighboring worlds is such a desirable place that anyone will feel encouraged to grab it. There is nowhere in the Solar System, outside the Earth, where men can live without protection. Even the more hospitable planets—such as Mars, and possibly Venus—will present such a challenge to our technology that we will be much too busy fighting *them* to be able to quarrel with each other. Like the Antarctic, they will present an environment in which men will have to work together in order to survive. And once one has grown used to the idea of cooperation it is very hard to get out of it.

We cannot be sure of the full effect that astronautics will have upon our lives until we know much more about the planets than we do today. If it turns out that we can do no more than set up a few scientific bases on the Moon, and perhaps Mars and Venus, the exploration of space will have great philosophical and technical consequences but little direct impact on the human race. On the other hand, it is perfectly possible that a century or so from now we may have established self-contained colonies on at least the three nearest celestial bodies.

To do this, as we have already remarked, would require immense technical resources, but such resources will certainly be available if they are needed. When we can control the fusion of hydrogen—and few scientists doubt that this will one day be possible—we will have the means of producing major alterations in geography and climate. The expression "planetary engineering" has already been coined for the technology which our descendants may employ to make other worlds fit homes for mankind.

Such a thought may seem wildly fantastic to some people, but it is a sober prognosis of what will undoubtedly happen if it is found worthwhile to exploit the now unknown resources of the other planets. It is only by stretching our imaginations to the limit, and considering on their own merits, without prejudice, all such apparently far-fetched ideas, that we have any hope of keeping up with the future. When we look back on what has happened in the last fifty years we can hardly doubt that the colonization of the planets is a coldly realistic appraisal of what may be the twenty-first century's greatest material achievement.

This at once leads us to wonder how much of history will be repeated on other worlds. Not too much of it, one cannot help hoping, and certainly the cruder parallels break down completely. There will be no transportation of convicts to the Venusian mines, no dumping of tea into the Martian canals by indignant colonists. The settlements we may establish on other astronomical bodies will be highly scientific (they will have to be in order to survive) and the analogy will be with Los Alamos, not Australia or New England. The prototype of the extraterrestrial administrator will be Dr. Robert Oppenheimer, not Sir Walter Raleigh.

Yet one parallel, and that perhaps the most important, will remain. The new offshoots of the human race, developing in strange and often fiercely hostile environments, will provide a cultural diversity and richness of experience which may be a sorely-needed tonic to this ancient, overcrowded Earth of ours. Here is an influence that cannot be assessed, but may be of the utmost value. Interplanetary explorations will provide a new and endless frontier for the human mind and spirit; without such a frontier, civilization would stagnate, for a completely closed society must eventually become decadent and sterile. Diversity—wealth of experience—these are the things upon which societies, as well as individuals, thrive, and without which they become stunted. What would have become of the human race, had it remained in whatever obscure region of the globe it originated a million or so years ago? By now it would have followed the dinosaurs into oblivion. However, our small and rapidly shrinking world will soon become a closed society, however fantastic such an idea would have seemed only a century ago—for that matter, only fifty years ago. The airplane created this situation within a single lifetime. But the spaceship will end it within another.

Of all the knowledge that will

After Mars will come the exploration of Venus. Unfortunately, despite the fact that she is our nearest neighbor, she is not likely to prove a hospitable one. Venus is about the same size as Earth, but hotter, as she is closer to the Sun. Her year is about 225 Earth-days. But what is most disappointing is that a thick, curdled atmosphere cuts us off from all direct observation of the lady. And, what's more, this atmosphere is composed not of water vapor, which man could use, but of impenetrable clouds of carbon dioxide. It is likely that we shall below find a monstrous desert of temperature above boiling water, torn by screaming hurricanes of choking, poisonous gas. Nevertheless, because all we have done so far is to test the top of this cloud-mantle, there is some hope that the carbon dioxide masks a humid marsh-world below, of the kind sketched here.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

After Venus man has a choice—to be too hot or too cold. Perhaps he will next take on the rocky Callisto, largest of Jupiter's twelve moons. Callisto is larger than our own Moon, but seems to be peculiarly constructed, perhaps of a spongy pumice core wrapped by an ice-coat. It will make a dubious residence, but has the advantage of presenting a spectacular view of Callisto's master, the King of the Planets, on whose own proper surface—protected as it is by a frozen, lethal atmosphere and equipped with a gigantic gravitational trap—man will doubtless never set foot.

flow back to Earth from space, that which will have the most profound effect on our conception of Man's place in the universe will be the biological record of the other planets. There is strong—but necessarily indirect—evidence that some form of vegetation exists on Mars, which is the only one of all the planets whose surface we can see and where we might expect to find life. (Venus, a rather forlorn hope because of its high temperature and poisonous atmosphere, is completely cloud-covered; and though we can examine the Moon more closely than any other celestial body the absence of water and atmosphere makes it most unlikely that life could ever have arisen there, though tough and exotic forms might be able to survive once they had got started.)

Even if we discover no more than a few hardy mosses or lichens on Mars, that will have an overwhelming influence on our outlook. It will prove that life is not a rare and perhaps unique phenomenon, but will imply that it is universal, arising wherever conditions are at all favorable. And once that crucial point has been settled, we will look upon the universe with new eyes.

WE WILL hardly be able to doubt that, circling among the hundred thousand million suns of this Galaxy alone, there must be myriads of worlds harboring not only life but intelligence. Our contact with such intelligence, especially if they prove to be our superiors, would be one of the most momentous events in the history of mankind.

For a number of reasons, it seems unlikely that we will encounter intelligent life-forms on any of the other planets in the Solar System. We cannot be certain of this, and one of the prime incentives of space-travel is to decide it once and for all. From what little we know or can guess of the evolution of the planets, it appears that our neighboring worlds are a few hundred million years ahead of us—or behind us—in the geological sense, even though they may all have been formed at about the same moment in the past. And since our own human history is so short compared with such spans of time, it appears most improbable that there are any creatures at even approximately our level of development on any of the other planets. The Martians (if they ever existed) may be back in the Carboniferous Period; and the Venusians (if they ever arrive on the scene) may regret that we humans disappeared from the scene at about the same time as their Age of Reptiles.

There has already been a good deal of speculation about the possible impact of astronautics upon religion. A number of religious writers (C. S. Lewis, for example) have expressed more-or-less open hostility to the idea of space-flight, but on logical grounds it is difficult to see why one should object to expansion into space if one accepts (as one can hardly help doing) the exploration of the Earth. Space is Space, whether you take it horizontally or vertically; religious arguments against interplanetary travel always remind me of the old lady who complained bitterly that airplanes were inventions of the Devil, and that men should travel in trains as God intended them to.

However, as far as Catholics are concerned the matter is now presumably settled. The Seventh Congress of the International Astronautical Federation took place in Rome during the summer of 1956, and at a special reception in the Vatican the Pope presented a lengthy and extremely well-informed address on the subject of space-travel, giving it his unreserved approval. His argument, which would probably be accepted by most Christians and indeed most non-Christians, was that Man would be false to his own nature if he failed to explore the universe around him as soon as he possessed the power. (It is, incidentally, a striking comment on our times that this address of the Pope's attracted relatively little notice. Even ten years ago it would have been a sensation; today everyone takes space-travel for granted and the youngsters wonder what's causing the hold-up.)

IN VIEW of what we have said about the unlikeliness of intelligent life in the Solar System, it does not seem that the exploration of the adjacent planets will cause any theological upheavals. But if we do encounter other races with different physical forms, completely different philosophies and religions, that may pose quite a few problems—particularly to those who take literally the phrase "in His own image."

I believe that, ultimately, such encounters are inevitable, though they may not take place for some centuries. They imply the conquest not of interplanetary but of interstellar space—that is, the crossing of gulfs a million times as great as those which sunder us from the planets, and which light itself takes years to cross. The problem of reaching the stars, though one of immense difficulty, appears to be soluble by a number of methods, all of which work in theory and at least one of which will therefore someday work in practice. It seems unlikely that the species that advanced from steam power to atomic power in a couple of centuries will take as long

(*Continued on page* 35)

C. S. Lewis.

"PROFESSOR WESTON . . . was a man obsessed with the idea which is at this moment circulating all over our planet in obscure works of 'scientifiction,' in little Interplanetary Societies or Rocketry Clubs . . . ignored or mocked by the intellectuals but ready, if ever the power is put into its hand, to open a new chapter of misery for the universe. It is the idea that humanity, having now sufficiently corrupted the planet where it arose, must at all costs contrive to seed itself over a larger area . . beyond this lies the sweet poison of the false infinite—the wild dream that planet after planet, system after system, in the end galaxy after galaxy, can be forced to sustain . . . the sort of life which is contained in the loins of our species—a dream begotten by the hatred of death upon the fear of true immortality."

—*From C. S. Lewis's "Perelandra."*

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Author, Hero, and Anti-Hero

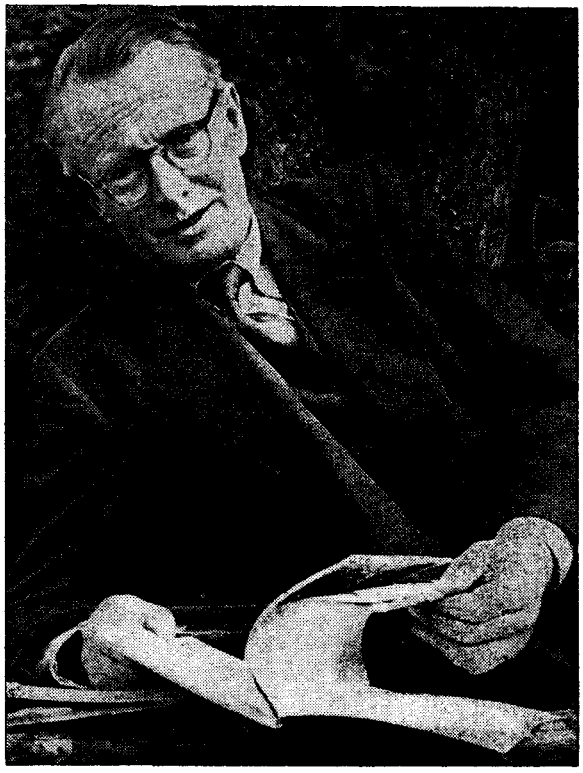
"The Vanishing Hero," by Sean O'Faolain *(Little, Brown. 204 pp. $3.75), is a collection of critical essays about novelists of the Twenties who remained aloof from their society. Our reviewer, Donald Barr, is a member of Columbia University's faculty.*

By Donald Barr

THERE are at least three kinds of literary criticism. A book review tells us whether or not to read the book, or helps us to make faces as if we had read it. Judicial criticism assumes we have read the book or will do so, and tells us whether or not it is good, and perhaps why. Instructive criticism, sharpening our perceptions and our wits and giving us confidence to deal with the odd, obscure or new, helps us to read the book, and to decide for ourselves whether it is good if we feel like deciding. This last is the best kind, and it is the kind that predominates in "The Vanishing Hero," a reworking of the Gauss lectures Mr. O'Faolain delivered at Princeton in 1953. After reading it, one turns to fiction with more intellectual energy. In fact, while reading it one is continually stopping to argue or refine Mr. O'Faolain's points, an indication of his liveliness and lack of side. It is a wonderful book.

It is a series of essays on eight British and American novelists whose first work or distinctive work appeared in the 1920s—Aldous Huxley, Evelyn Waugh, Graham Greene, William Faulkner, Ernest Hemingway, Elizabeth Bowen, Virginia Woolf and James Joyce. It has a unifying idea. If, Mr. O'Faolain says, these men and women are representative, then between 1920 and 1930 it was no longer possible for writers, persons of scrupulous imagination, to feel and think as part of society. Some dim immense disruption, some failure of values, had driven them out to find their own truths and their own dreams as "more or less isolated receptivities." Nor have writers been able to return to society since.

This large suggestion of anarchy is based on a specific thesis of Mr. O'Faolain's: that the Hero, the fine fellow whose side we were on and who stood as the champion of society's code, has disappeared from fiction, and that in his place is a sort of anti-Hero, whom we favor but who is at odds with the accepted standards of society, with society itself, and with himself. He may be a rebel, like one of Joyce's Lucifer-figures, or he may be an exile, like one of Graham Greene's defeated men in his novels.



Sean O'Faolain—"liveliness and lack of side."

Mr. O'Faolain traces this disquieting type to Stendhal's "The Red and the Black," the "hero" of which, Julien Sorel, is an adventurer who intellectually sets about exploiting society. All the ancestry of the anti-Hero is French. It is not possible, Mr. O'Faolain asserts, to trace his development in England: "We are almost on the threshold of the twentieth century before we observe English novelists begin to take on something of the individualistic spirit of the French; and the same naturally applies to the novel in America."

But surely Mr. O'Faolain's inferences rest unsteadily on this.

In the first place, we *can* trace this development in England, not just to Thackeray's "Vanity Fair" (subtitled "A Novel without a Hero"), but all the way to Defoe's enchanting sinners. For that matter, Disraeli, the future Prime Minister of England, in his first novel anticipated by five years the character of Julien Sorel.

Secondly, the "disintegration of the social Hero" was early and flamboyant in English drama and English poetry. Consider Romeo: his successive rebellions against the code of his father, the laws of the city, and the commandments of God. Consider the superb Horner in "The Country Wife." Consider Byron. The English novel is a special case because it had a special audience and use. Mr. O'Faolain forgets that it was peculiarly the entertainment of a Protestant middle class which had inherited the puritan notion that the stage was immoral; and this class, crowding the gentry for privilege and power throughout the eighteenth century, read novels to learn acceptable behavior. The novelist felt himself looked up to as an arbiter; indeed, many of the things which Mr. O'Faolain attributes to the dark philosophies or great busy souls of his eight are really due to the fact that novelists, no longer looked up to but clinging to their traditional status, naturally tend to bully their readers.

Hemingway, for instance, is always saying to us: "I know more about *living* than you do. To you, death and sex are just bodies, but to me . . ." Mr. O'Faolain makes much of the fact that Hemingway, except for some short pieces and one bad book, has never written about his life in the United States. Is this because he has "confiscated his own childhood" through fear of tenderness? Or is it because we also have lives in the United States? All Hemingway's heroines are foreign girls; this is his way of saying, "All you people in Pittsburgh are virgins"—it is the Road to Mandalay trick.

Graham Greene is always saying to us: "I am more miserable than you. You suffer when things go wrong, whereas I suffer for *no apparent rea-*

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

son." Mr. O'Faolain attributes this to Jansenism, the heresy that man is evil and cannot will his own salvation; but it is only Greene's way of asserting his superior inferiority. William Faulkner says: "I can go too far for you." James Joyce says: "You cannot follow me." Of the eight, perhaps the one who bullies us least is Aldous Huxley.

BUT if Mr. O'Faolain's thesis is dubious, his critical analyses of the separate authors are exciting and rare. In Hemingway he finds not a nihilist making virile gestures, but an admirer of the ancient virtues of honor and steadfastness. In Faulkner he finds a good man without ideas, who cannot construct, cannot express, cannot control, but with a certain gargling nobility. Graham Greene he treats unfairly; for example, he accuses him of making his characters mere "puppets subservient to his theme," and on the next page he remarks: "It was not so much Greene who began to write thrillers in 1931 as his characters, who ran away with him."

Perhaps because he is an Irishman with a real training in rhetoric, or perhaps because he is a marvelous writer of fiction, he is brilliant in dealing with style and narrative technique—his treatment of Elizabeth Bowen is a revelation—and his own style is graceful and lucid. Curiously enough, the exceptions are in his chapters on Americans. He appears to say that Hemingway's style is based on short staccato sentences. The real basis of Hemingway's style is that he rarely puts clause within clause; he puts simple clauses together simply, in a string, using conjunctions; he is devoted to the thaumaturgic "and," the "and" of the first chapter of *Genesis*. In dealing with Faulkner, O'Faolain's own style suddenly turns into a frightful exhibit of American intellectual prose, knotting like an anaconda that has eaten a bad explorer. But such slips only point up the extraordinary achievement of this book: that it is an intelligent, *public* work of criticism from which writers and readers can learn to write and read.

Devotion to Print

"The English Common Reader," by Richard D. Altick *(University of Chicago Press. 430 pp. $6), is a comprehensive study of the nineteenth-century mass reading public.*

By John T. Winterich

SUBTITLED "A Social History of the Mass Reading Public 1800-1900," this penetrating and comprehensive study explores a cultural area which most literary surveys bypass, or take for granted, or ignore. If, for instance, you have never heard of John Vine Hall, your ignorance does you no discredit. Hall's "The Sinner's Friend," first published in 1821, went through 290 editions, or a million copies, in thirty years. Legh Richmond's "The Dairyman's Daughter," "The Young Cottagers," and "The Negro Servant" circulated 1,354,000 copies across fifty years.

Legh Richmond—one assumes he pronounced Legh "Lee," which gives his name a rich F.F.V. flavor—was secretary of the Religious Tract Society, and thereby hung many tales, plus much incentive to reading for which Mr. Altick gives the society due credit. By 1861 its annual output was some twenty million tracts plus thirteen million copies of periodicals. Most of this mass of print was given over to dreary moralizing and cloying didacticism, but at least it told stories. In the 1870s, however, one tractarian editor asked Anthony Trollope for a novel. The novel didn't suit the editor, but he had made the effort. It is Mr. Altick's ingenious suggestion that the step from the tract to the "prose of ideas" (Mill, Newman, Ruskin, Spencer, for example) was more easily taken in England a century ago than it would be by today's Sunday newspaper readers.

Mr. Altick's chapter on "The Self-Made Reader" may not be his most important, but it is perhaps his most interesting. His instances of devotion to print are as heartening as they are illuminating. In the 1840s a group of mill girls met at five in the morning to read Shakespeare for an hour before going to work. Employers frequently made their bookshelves available to workers and apprentices. Some factory hands read at their looms—"if their work is right we never notice it," said one overseer who admitted that he had "read many a volume through when I was a spinner."

"The English Common Reader" misses no tricks. Mr. Altick weighs the influence of overcrowded dwellings, poor house-lighting, the factor of fatigue (after a fourteen-hour working day), and the high cost of seeing-aids as deterrents to cuddling up with a good book on a Victorian winter evening. Spectacles were a luxury; twenty-five-year-old Thomas Carlyle noted in a letter in 1821, as something to crow about, that he had been able to buy his father and mother each a pair of glasses from Edinburgh.

MR. ALTICK does not end on a note of unalloyed optimism. "Nearly everybody reads something nowadays," he observes, "but only a small minority read wisely or well." He quotes George Gissing to good purpose: "The public which would feel no lack if all book-printing ceased tomorrow is enormous." The book in our time faces competition undreamed of in a day when a Scots bookseller's apprentice named William Chambers on his way to work regularly earned his breakfast roll by reading Fielding and Smollett to a baker and his two

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sons while they kneaded their day's supply of bread dough.

Pertinent appendixes give a chronology of important events in the mass-reading field for the period covered (all of which, of course, are treated at length in the text), a roster of best-sellers ("Uncle Tom's Cabin" enjoyed "probably the greatest short-term sale of any book published in nineteenth-century England"), and figures on periodical and newspaper circulation.

THE AUTHOR AS FARMER: Treatments of a literary person written under the personal influence of the figure involved are ordinarily quite a special breed, and they must, in fairness, be accorded charity before all else. Furthermore, we all tend to evaluate books according to a standard which is double, or perhaps more often triple or quadruple.

Morrison Brown's **"Louis Bromfield and His Books"** (Essential Books, $4.50) is quite as influenced by Bromfield's having been "a gentleman of great personal charm and culture" as by his having written books. Malabar Farm bulks as large as "The Rains Came." My only complaint is that perhaps it should have bulked larger, that Bromfield ought to have been allowed his due as a popular agronomist without allowing this virtue to puff him up as a novelist. One can easily forgive the lack of criticism of the novels: most of the books are covered with little more than plot-summaries. What is more difficult to understand is the biographical portions—straight narrative with little attempt to account for the larger moving forces in Bromfield's life. Why did Bromfield feel so strongly and personally about farming? What made him so strongly Taftian in his politics and yet so radical in his agriculture? These and other questions are skirted or entirely avoided. Asking and answering such queries might have moved the author to a more independent position.

—THOMAS C. F. LOWRY.

ROMANS À CLEF: Floyd C. Watkins has spent several years discovering the real life prototypes of many of the people and the actual setting of events detailed in the writings of Thomas Wolfe. He presents his findings, the comparison of fact with fiction, in **"Thomas Wolfe's Characters"** (University of Oklahoma Press, $3.75), a short book which speaks importantly of the manner in which one novelist manipulated source materials as he brooded over the life he had lived, the people he had known, and what they had meant to each other and to him. —LEWIS LEARY.

IDEAS

The "Beat" Generation Attacks

***"Emergence From Chaos," by Stuart Holroyd** (Houghton Mifflin. 224 pp. $4), is the inquiry of a member of "the beat generation" into the "sterility" of contemporary humanism.*

By William Bittner

THE young are always a confusing lot, but today's youngest adults are especially so. Dubbed the "silent," or the "beat" generation, they have shown a strong tendency to tackle the problems of the world on a personal level, shunning organized protest. It is not difficult to see a common pattern behind the conformity of those young people who deal with their elders in business, on college campuses, and elsewhere where the "Ivy League look" is desirable, and the solitary bohemianism of the hipsters of Greenwich Village and the blue-jean intellectuals of San Francisco. They grew up in a world that tried to follow the way of the commissar and produced war, genocide, and the atomic bomb; so they turn instead to the way of the yogi.

In "The Outsider," Colin Wilson, at the age of twenty-four, analyzed—largely by means of the world's fiction—the personality that best retains its individuality in the face of strong group pressures. Now an even younger man, Stuart Holroyd, continues the attack on today's arid humanism in "Emergence from Chaos." The answer, these young men find, lies in religion—not the Billy Graham variety, but a self-awareness, the culmination of which is mystical experience. Holroyd discusses three types of spiritual man: the sinner, the saint, and the mystic, and among mystics (who need not be saints and might be sinners) he finds the mystic proper, who seeks to efface himself completely in union with the divine, and the mystical artist, who almost always stops short at illumination.

A good two-thirds of this book is devoted to studies of Dylan Thomas, Walt Whitman, Yeats, Rimbaud, Rilke, and T. S. Eliot, for, as Holroyd says in his introduction, "The poet is always the most sensitive register of contemporary sensibility, and in this book I have tried to show how a number of poets have reacted to the modern predicament, what means they have used, and to what extent they have succeeded in emerging from the chaos into which they were plunged by the accident of their birth." In so doing he clarifies—I hope once and for all—that existentialism, both Christian and atheistic, is a religious movement and not a philosophy. He says, "Behind the work of all these thinkers there is a desire to restore to man the *breadth of existence* which he has unsuspectingly lost in the conditions of modern life."

Holroyd's discussions of individual poets are fascinating but uneven. Walt Whitman is too big a man for him to give more than a lick and a promise. In his effort to find spiritual unity in the mélange that was W. B. Yeats he strains the fabric of his argument almost to the ripping point. Yet Rimbaud and Rilke fit his method perfectly, and his analysis of the shortcomings of Dylan Thomas and T. S. Eliot pierces through the usual awe over the brilliance of their technique. This is not the kind of literary criticism that Eliot approves of, but he certainly must confess to being better understood in these pages than he generally is.

The battle in these poets is between heart and head, and the only victory is a draw. Thomas, like D. H. Lawrence, glorified the instinctive life. In-

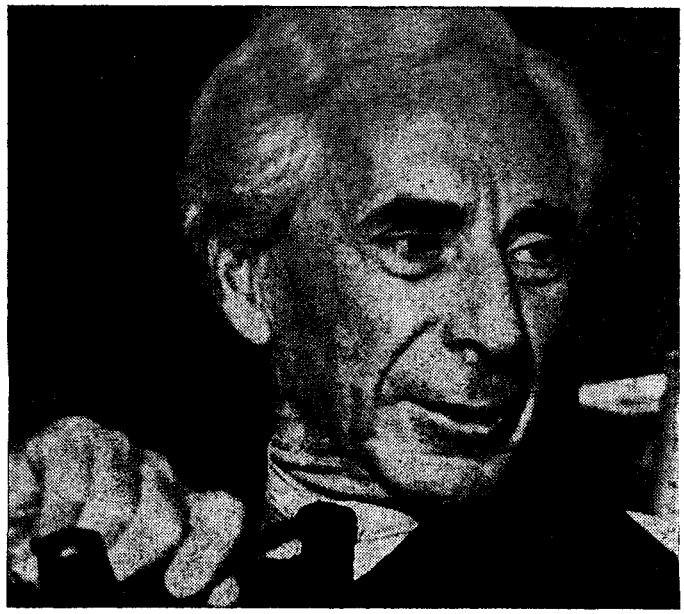
Stuart Holroyd—"way of the yogi."

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

deed, as Holroyd says, "Lawrence was a dialectician and what he preached was the practice of the poet Dylan Thomas." Eliot, to take the opposite extreme, thought his way to religion. He and Rilke arrived at systems, but Rilke's was his own, and Eliot's a traditional, established religion. Yeats and Rimbaud both attempted to will themselves into religious vision; Yeats failed but grew as an artist, and Rimbaud's success led to his abandoning poetry. All these observations are valid, if not the whole story, and lead us to deeper appreciation of the poetry these men produced. But in saying "Walt Whitman's idea of deity was neither theistic nor pantheistic, but anthropomorphic," Stuart Holroyd has clearly betrayed the shortcomings of his study.

This book is not adequate to treat Whitman for, as the author says, "For him the world was not chaotic, and consequently the concept of the artist as the man who imposes order upon chaos, who fashions from the disorderly and meaningless raw materials of human life something which is perfect, lasting, and meaningful, was not acceptable to him." Whitman, alone of this group, was neither existentialist nor communicant. He saw man, not as God, but, along with the rest of the cosmos, as an expression of God. Life, to him, was not a chaos to be brought in order, but a perfection that needed only to be used. He is the only totally American poet discussed in this book, and although he is the one farthest from us in time, the Whitman tradition remains with us and finds expression in the works of even our youngest and our most modern poets.

The flaw in Holroyd's thinking lies in his antiquated notion about the mystical artist. All truly great artists are mystics, but mystics with a difference. They seek, not to be unified with deity, but to be unified with the world as it is. To be a poet and to be, at the same time, American, is to express the American vision; and that Walt Whitman did, as did every American artist worthy of the name up to Lawrence Ferlinghetti, Allen Ginsberg, and whichever one we hear about tomorrow. These men are not existentialists, but they are religious —in the deepest sense of the word— and even if the young seem not to be engaged in the disputes of the past, we can be assured by Stuart Holroyd's sensitive and perceptive book that they are engaged in the more subtle and fundamental controversy between existentialism and the more hopeful belief that guides American thought.



—*Disraeli.*

Bertrand Russell—"a work of piety."

Lord Russell Plus Shock

"Why I Am Not a Christian," by Bertrand Russell *(Simon & Schuster. 259 pp. $3.50), is a collection of essays on religious and moral subjects by a distinguished living philosopher. Professor Brand Blanshard of Yale University reviews it.*

By Brand Blanshard

DESPITE its title, Bertrand Russell's just-published book "Why I Am Not a Christian" is in a sense a work of piety. It is a partial reparation for a great and unforgotten wrong. To many readers its most interesting part will be the story, well told by its editor, Professor Edwards, of how City College of New York almost, but not quite, added a star to its galaxy of scholars.

In 1940 CCNY invited Russell to join its staff, and to the general delight, he accepted. "Nobody comparable in fame and distinction," writes the editor of this volume, "had ever before been a professor at City College." The department, the faculty, the president, the Board of Higher Education, were all enthusiastic about his coming. Then Bishop W. T. Manning of the Episcopal Church entered the picture with a denunciatory letter that was printed in all New York newspapers and let loose a religious storm. The Catholic *Tablet* described the appointment as "a brutal, insulting shock"; and the Jesuit weekly *America* described the appointee as "a desiccated, divorced, and decadent advocate of sexual promiscuity." A certain Brooklyn housewife who had a daughter at CCNY was encouraged to bring suit to block the appointment. A local judge named John E. McGeehan tried the suit and duly pronounced Russell unfit to teach. The appointment was cancelled.

The bulk of the present volume consists of fifteen of Russell's essays on religion and morals, produced over a period of fifty-five years, and carrying a new preface by Russell himself. Some of them, including "What I Believe," "The Free Man's Worship," and the title essay, are already well known, but many others, such as "The Fate of Thomas Paine," "On Catholic and Protestant Skeptics," and "Nice People," have been quarried from little-known sources.

It should be owned at once that if mere heresy is ground for ostracism, critics will find here what they want. It would be idle to think that in this regard, Russell has mellowed in the least. "There has been a rumor in recent years," he writes, "to the effect that I have become less opposed to religious orthodoxy than I formerly was. This rumor is totally without foundation. I think all the great religions of the world—Buddhism, Hinduism, Christianity, Islam, and Communism—both untrue and harmful."

Why untrue? Because he thinks

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

that a religion must have a creed and that the creeds of all these religions are simply contrary to fact. For Christianity he holds that a minimum of three beliefs is essential—the belief in the existence of God, in immortality, and in the divinity, or at least the unique goodness, of Christ. He examines the chief arguments for the existence of God, which he takes to be the arguments from a first cause, from design, from natural law, and from moral law, and dismisses them one by one. If people accept the conclusion of such fallacious arguments, the main reasons, he says, are that they have been taught in infancy, and that they have a passionate wish for safety. As for immortality, he considers that psychical research is studying the problem in the right way, but that the evidence so far adduced gives small warrant for the belief.

There are many persons who would go this far with Russell, but would hold that the morality of Christianity and the character of its founder are beyond the reach of criticism. Russell will not grant them even this. To be sure he holds the character of Christ in admiration—reverence would be too strong a word—and protests that so-called Christians do not take His teaching seriously enough. But he thinks that the expectation of Jesus of an end to the world in His generation was inconsistent with any superlative wisdom on His part, and suggests that His belief in everlasting punishment, His anger with those who did not accept His teaching ("ye generation of vipers"), and His action toward the Gadarene swine and the unfruitful fig tree were below, and not above, the level of secular ethics.

Two questions will arise in most readers' minds about Russell's book. The first and more important is whether his case is sound. One can only say that, whether sound or not, the case is lucidly and powerfully stated, though marred at times by flippancy.

To the other question an answer may be hazarded more readily. Should such a book, with its frank and flat negation of the general faith, be published at all? I think it should, and that it should be widely and seriously read. Russell, through his father's wish, was the god-child of John Stuart Mill, and he has taken over Mill's teaching that the best way to arrive at truth is by the freest sort of discussion, in which every proposed doctrine must run the gantlet of criticism. If religious belief can meet such criticism as Russell's, it will be the firmer for having done so. If it cannot, the sooner and more responsibly it can amend its position, the better.

Sparkplug of Enlightenment

"Diderot: The Testing Years," by Arthur M. Wilson *(Oxford University Press. 417 pp. $10.50), is the first half of a biography of one of the four leaders of France's "philosophe" movement, whose monument is the great French Encyclopedia. It is reviewed by J. Salwyn Schapiro, professor emeritus of history at the City College of New York, author of "Condorcet and the Rise of Liberalism" and other books.*

By J. Salwyn Schapiro

DURING the Enlightenment in eighteenth-century France a new school of writers arose, known as the "philosophes," who devoted their artistic genius to the creation of a new and better order of life. Literature became charged with a passion for reforming society, and a new figure appeared on the stage of history—the "intellectual."

Much has been written about Voltaire, Rousseau, and Montesquieu, but little about Diderot, one of the Big Four of the philosophe movement. Professor Arthur M. Wilson of Dartmouth has undertaken to answer this need by his book, "Diderot: The Testing Years, 1713-1759," the first part of a biography of Diderot. By all tests it is an outstanding work of scholarship. Wilson exhibits complete mastery of the material concerning the philosophe: his life, his writings, his career, and of the literature in various languages dealing with him. In this biography the author does not attempt to make a Williamsburg "restoration" of an historic personality. Though he portrays Diderot as a truly eighteenth-century figure he does so from the viewpoint of today, using contemporary illustrations, comparisons, and interpretations. Furthermore, Wilson's clear, readable style and his blending of the personal and the intellectual make his book an unusually valuable study of the most typical, yet the least known, of the leading thinkers of the French Enlightenment.

It is difficult to give a correct estimate of Diderot's true stature as writer and thinker. Though a prolific writer on many subjects he wrote no masterpiece, no "Candide," no "Social Contract," no "Spirit of Laws." As a stylist his gifts were limited to the easy versatility and the running prose of the practiced journalist. As a thinker he was remarkably suggestive, at times with flashes of original insight. He sparked new literary genres, such as art criticism and the bourgeois drama. He anticipated the theory of evolution by his "transformist" view concerning organic changes in animal life. He gave suggestive hints concerning the psychology of the blind. But, as the author remarks, Diderot had an "inveterate fondness for flushing more ideas than he could bag." He never went beyond brilliant improvisation.

For all that, Diderot did create two masterpieces: himself as *le philosophe* and the French Encyclopedia. Wilson tells the story of Diderot's life in literary Paris with verve and sympathetic understanding. This "big-hearted, well-meaning, rather grandly negligent, brash, and tactless" man, as the author characterizes him, is revealed as the prototype of the bohemian intellectual of today. In his person Diderot typified the drive and power of the small group of philosophes who dominated the intellectual life of France of the Enlightenment. His mind, according to the author, was "the central vortex of eighteenth century thought."

Wilson's book is not only the biography of a man; it is also the biogra-

—Bettmann.

Diderot—"brilliant improvisation."

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

phy of a literary work, the French Encyclopedia. It describes fully and well this greatest work of the Enlightenment, its origin, its character, its contents, its importance, and its trials and tribulations. According to the author, Diderot, as editor, transformed the Encyclopedia from a "mere work of reference to a conveyor of ideas." As a consequence it achieved "transcendent importance in transmuting values and changing the outlook of the eighteenth century." In accomplishing this extraordinary feat Diderot raised editorship from a critical function to a creative art of the first order. This alone entitles him to be ranked among the leading philosophes.

The first volumes of the Encyclopedia appeared without much difficulty. Before long it became evident that the work was, as Wilson describes it, "an arsenal in which the weapons of critical thought were kept—polished, whetted, and instantly at hand." The authorities in state and church, at first complaisant though suspicious, soon realized the danger from this new power of the pen. In 1759 a royal decree ordered the suppression of the Encyclopedia in its entirety.

Then followed one of the decisive battles in the history of intellectual freedom. Diderot determined to see the thing through at any cost to himself or to anyone else. Deserted by his fellow editors and by many of his contributors, he battled almost alone to keep the Encyclopedia from foundering. The courage, the steadfastness, and the resourcefulness displayed by Diderot in this struggle made him a great hero in the never-ending war for liberty of thought. By using all sorts of means to outwit the authorities he managed to have the succeeding volumes of the Encyclopedia printed. Diderot, writes Wilson, "laid all his bets on posterity," and won.

"In its subject matter," comments a recent writer on the Encyclopedia, "almost everything is superannuated, in its aspiration everything is still alive." The same may be said of its editor, whose views are now dated, but whose spirit of freedom remains a great liberal heritage. Professor Wilson is to be congratulated in giving Diderot his rightful place in the unfolding of the Enlightenment.

DEFENDER OF REASON: One of the most valuable services a student of a foreign culture can render is to analyze some of its particular thought patterns for the benefit of his own country. He thereby not only helps his compatriots to a fuller comprehension of that culture but suggests as well new guides or norms in their own orientation. Robert J. Niess, in presenting the ideas of the late Julien Benda to the American public in a book called **"Julien Benda"** (University of Michigan Press, $6.50) has rendered such a valuable service.

Benda's writings are scarcely known on this side of the Atlantic. Yet for more than forty years they have periodically set Frenchmen's blood to boiling. In the name of traditional French intellectual values, Benda was the great accuser, and few among modern writers and thinkers escaped his indictments. Bergson was always his chief target, responsible, in Benda's eyes, for the trend away from "la raison" to the cult of feelings and emotion. Through him the pernicious philosophies of Germany came to supplant the noble rationalism which is France's heritage. In politics this has led to doctrinal nationalism, race and class prejudice, and a host of other evils which can be corrected only by a return from Marx to Descartes. In literature and the other arts, confusion reigns. The intellectuals on all fronts have betrayed their mission. As heckler and critic of contemporary civilization Benda had no equal. Although his contentions were often erroneous and always overstated, they were based on one of the most authentic patterns of French thinking. For this reason he was listened to at home and should be better known abroad.

In remarking on the importance of Professor Niess's book to ourselves, I am not unmindful of its interest to the French as well. With a perspective that perhaps only a non-French scholar could bring to this subject, Professor Niess exposes the error and inconsistency in Benda's thinking at the same time giving full recognition to all that is sound and admirable.

—Laurent LeSage.

EQUALITY WITHOUT DULLNESS: For fifteen years some of the most noted scholars in the country, calling themselves the Conference on Science, Philosophy and Religion, have been gathering annually in order to share ideas and opinions on some of the unsettled issues of human life and society. For the past several years they have been concerned with the problem of equality—its meaning, its conditions, its limitations—and the results of their 1955 conference are now available in book form under the title **"Aspects of Human Equality"** (Harper, $5).

The scholars represent a wide variety of academic disciplines, including anthropology, biology, history, economics, international law, political theory, theology, sociology, and philosophy. As might be expected, each one approaches the problem from the vantage of his own sphere of competence and each one manages to turn up a facet or two that escapes the notice of the others.

Since none of the scholars desires the kind of society in which everything is flat, even, equal, and dull, the problem is not one of achieving equality in this levelling sense but rather of assuring to every one an equal opportunity to become unequal. The problem, as can be seen, is thus a paradoxical one and one well calculated to challenge the best analytical efforts of contributors like Richard McKeon, Alfred Schutz, Albert Hofstadter, Hudson Hoagland, Thomas R. Adam, William Haller, Louis Finkelstein, Perry Miller, Dorothy D. Lee, the late Charles S. Johnson, Eli Ginzberg, Quincy Wright, and Leland M. Goodrich.

—Robert Bierstedt.

Leaves at Night

By Richard Moore

DRY leaves are clicking somewhere over darkened pavement
Like paws of little dogs running.
The leaves are not on leashes
When autumn comes,
And they will nip the traveler
With memories
Of what has withered out of him
And scuttled into doorways
And found out many drains.

Keep them, keep them—you cannot keep them fastened.
No: you must let them run
And smell what crevices they dare;
For all the leaves are pulling from their branches.
Tomorrow a girl may catch one
And bury it in her hair.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

FICTION

A Bumper Crop of Novels

Autumn is the season of the year when the book publishers bring forth one of their most plentiful harvests of novels. This week's crop, which is reviewed below, contains a comedy of manners by Pulitzer Prize-winning writer Paul Horgan; a gay and witty tale by one of the best known novelists of our time, Graham Greene; a potential best seller by Thomas Costain; and a new tale of Africa by Stuart Cloete, a man highly praised for his previous fiction and non-fiction writings about that continent.

OF MANNERS, MAMMON, AND THE GOLDEN GATE: America, more specifically the New Byzantium on our West Coast, has spawned a new breed. In his new novel **"Give Me Possession"** (Farrar, Straus & Cudahy, $3.50), Paul Horgan examines the racial credo of this "race of the golden Californians"—young San Franciscans who are healthy, wealthy, though not flamboyant, a little like characters out of F. Scott Fitzgerald but with built-in security features.

David Bonbright and Agatha Winlake are both members of the new species. Although they came from different social classes (he was born wealthy, she *very* wealthy) they prospered, married each other, and prospered some more in the two decades following World War I. But—and this is the heart of Mr. Horgan's matter—they didn't really grow up until long after they were old enough to vote, and it took the emotional cauldron of World War II to make them do it.

The war was the first real challenge that David and Agatha had ever come up against. It brought David into contact with death and its counterpart, life. He fell in love with a French girl and learned that life was a fuller sensation than mere well-being. He discovered that he had responsibilities and that he himself could be haunted by the meaning of his wartime experience until he plumbed its meaning and laid the foundation for a truly responsive marriage with Agatha.

In this penetrating twentieth-century comedy of modern manners and Mammon, Mr. Horgan has written a graceful, witty, and lyrical book.

—GERALD WALKER.

EXULTANT IRISHMAN: Walter Macken's new novel **"Sullivan"** (Macmillan, $3.95) is concerned with the problem of the artist's struggles in an indifferent or hostile bourgeois society. A likable, volatile, and talented Irishman with a penchant for disaster and a ravenous desire for success, Sullivan yearns to be an actor. Acting is a fever in his blood which must run its course or destroy him. But, too, he must get away from Duke Street, the shabby section of the Irish city of his youth, with all its painful memories of poverty and misery and death. Sullivan's ambition inevitably leads him from Duke Street. Like the picaros of old he is accompanied by a Duke Street companion, the amiable and long-suffering Pi, who throughout the novel effectively plays Sancho Panza to Sullivan's own role as Don Quixote.

"Sullivan," like its hero, has a tendency to deteriorate as it progresses. The sharp detail and the admirable clarity of the Duke Street sequences become somewhat blurred in the later sections. Even Pi and Sullivan's patient wife at times taxed this reader's credibility, although Sullivan—handsome, impetuous, erratic, and confused but essentially a good human being even when most corrupted by the bitch-goddess Success—throughout seems believable and sympathetic.

Mr. Macken is a writer with a robust sense of humor and drama, and a keen ear and eye. His "Sullivan" is an exciting book.

—WILLIAM PEDEN.

SENATOR O'RAWN AND THE MAGNA CHARTA: Thomas Costain's newest historical novel **"Below the Salt"** (Doubleday, $3.95), is essentially of his own "The Black Rose" class, which means that it is a thoroughly well-wrought, skilfully plotted and developed romance against a background that he has studied well. He has introduced a somewhat surprising and unnecessarily elaborate framework for his main story—a contemporary opening and closing, with a super-flashback to the thirteenth-century world of Magna Charta.

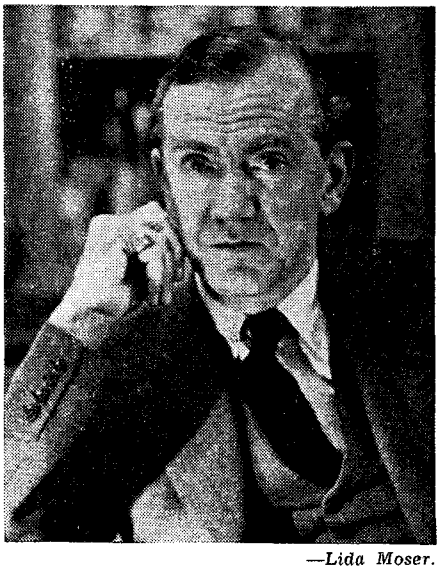
The device employed for this is reincarnation. The story is narrated from memory by Senator Richard O'Rawn, shortly before his death, to young John Foraday. The Senator had been present at the signing of the Great Charter, on the meadow of Runnymede, and an odd chance has rolled back the veil so that he recalls his experiences in his earlier persona. The reason for all this is apparently Mr. Costain's alarm that our world is tempted toward various forms of collectivism, which he rightly sees as destructive of freedom. His desire, in retelling the story of Magna Charta, is to remind us of how dearly liberties are bought and how terrible it is to live without them.

The main tale relates the chivalrous adventures of the disinherited young Saxon knight, Richard of Rawen, and his faithful squire, the freedman Tostig. Because of his distaste for King John, Richard is exiled to the Continent, where he and Tostig have encounters with Pope Innocent III and with the great churchman Stephen Langton, who, as Archbishop of Canterbury, was a prime mover in bringing the Charter to reality. There are, of course, beautiful princesses, including a golden Eleanor, who must be rescued from imprisonment at the hands of John.

Make no mistake about it, "Below the Salt" will be a popular book.

—EDMUND FULLER.

LET THE CHIPS FALL: Properly ticketed "an entertainment," Graham Greene's **"Loser Takes All"** (Viking; paperbound, 95¢) makes its first American book appearance (following serialization in *Harper's*) as an attractive stiff paperback. Its 23,000 words tell the story of a London accountant—beg pardon, assistant accountant—who is about to honeymoon with his bride at Bournemouth, but a summons from



—Lida Moser.

Graham Greene—"gaiety and wit."

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the Gom (equals Grand Old Man, equals top boss) offers him instead the opportunity to honeymoon in Monte Carlo. The loving couple accept the offer, but when they reach the Riviera things begin to happen, or rather not to happen. They do get married; the Gom's yacht fails to appear; then, to while away the hours and also to earn the money for his board bill, the bridegroom starts playing the tables, using his own system (details not given). Any hint of what follows would anticipate the involvements of a tale that is told with the deftness, gaiety, and wit that one customarily associates with the lighter-hearted Graham Greene. —JOHN T. WINTERICH.

SPRITELY WESTERN: There are all kinds of Westerns, but **"Unholy Uproar"** (Lippincott, $3.50) is the first that this reviewer has seen in which the *deus ex machina* hails from the spirit world. The spritely spook in Clyde Brion Davis's entertaining horse opera is one Pablo Ninguno, who materialized sometime during Maximilian's reign and has since been making mischievous use of his ectoplasmic influence. Pablo's principal base of operations is a sun-baked Gomorrah named Montoro City, which has been enveloped in a sinister miasma since the time of the cliff dwellers. This history of uninterrupted depravity, muses Mr. Davis, tongue firmly in cheek, may possibly have a geophysical origin. Suppose, says a character (who has read extensively in science fiction), that a geological deposit out Montoro City way is causing a "short circuit" in the earth's magnetic field; and suppose that this throws a cosmic whammy into the nervous system of everyone for miles around. Well, sir, this kind of malevolent irradiation would make Montoro City into a trigger-happy, slot-machine-ridden sink—which is just exactly what it turns out to be.

On the material level, Mr. Davis's story involves the pickle of a young ranch manager named Boone McClure who is unjustly accused of murder. The fact that Boone's destiny is entirely in the hands of a sombreroed poltergeist is almost fatal to the novel's suspensefulness, but "Unholy Uproar" is an entertaining charade nevertheless, and one which the author must have had considerable fun in writing.

—MARTIN LEVIN.

GILDED PILLS: In Jay Deiss's novel about the pharmaceutical industry, **"The Blue Chips"** (Simon & Schuster, $4.50), the old adage that power corrupts and absolute power corrupts absolutely seems to be the touchstone of Dr. James Howell Winslow's life. At first Winslow belongs to the lonely world of scientific researchers passionately devoted to his microbes, but slowly he wanders over the bridge into the executive camp of the cash register boys who are less interested in scientific methods than results. In a complex world where researchers need time to verify products while the sales department strains at the leash, Winslow compromises his way to the top by outmaneuvering his associates and staging a public relations show that saves the company from the consequences of a premature release of a new wonder drug.

Mr. Deiss is obviously aiming for a popular market, so his characters have more flash than depth, but his material is fresh enough to cause readers to sit up and take note.

—SIEGFRIED MANDEL.

OF FATE AND ADOLESCENCE: "Kokoro," by Natsume Soseki (Regnery, $3.95), is often called "the first modern Japanese novel." It has won this distinction because its author—who lived from 1867 to 1916, roughly the era of the birth of modern Japan—broke with the stylistically brilliant but emotionally and intellectually shallow feudal fiction. The lack of names, professions, and specified actions renders plot summary impossible. But this much can be said: three parallel lives go through adolescence, and there are eight deaths, three by suicide. The theme, crudely put, is that modern Japanese are caught in a struggle of emotion and will, or emotion and intellect. This civil war of the consciousness ends in disaster because "fate" intervenes. The nameless characters are Everymen, individuals by virtue of highly conscious experience, but doomed because emotional values are useless to the modern world. They are not unlike the "superfluous men" of Russian fiction in the last century. At its best, "Kokoro" conveys this theme through scenes of lonely agony and a too infrequent romantic irony that raises a character to hope on too slender evidence and then dashes him to despair.

Edwin McClellan's translation is adequate, sometimes rising to the rightness of the inevitable phrase,

(*Continued on page* 34)

—From the book.

THE 1920s—the years of bootleg gin, Charlie Chaplin, Clara Bow—have been called many things. Paul Sann called them **"The Lawless Decade"** in a picture-and-text book (Crown, $5.95) that will evoke wry nostalgia for the middle-aged and romantic dreams for those who are younger (and who firmly believe such times must have been far more fun than the PTA- and Bomb-perplexed present). Mr. Sann's book is a scrapbook rather than history, the very thing for guest rooms and going-away presents. —BRENDA KING.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

How Powerful Are the Persuaders?

By ELMO ROPER

MANY good people have become concerned recently at the claimed ability of certain "experts" to diagnose the mass mind with such diabolical cunning that "We the People" are nothing more than puppets in the hands of shrewd manipulators who move us around as though we were pawns on a chess board.

The concern of these good people, in my opinion, is not necessary, and I should like to exercise my privilege as a member of *SR*'s editorial board to write a dissenting opinion of a book favorably reviewed in these pages.

I refer to Vance Packard's "The Hidden Persuaders" (*SR* June 1). *SR*'s reviewer, Gilbert Seldes, apparently shared Mr. Packard's alarm over certain claims to manipulation of the public mind made by a small clique of skillful self-advertisers. In my view the mistake made by the author (and Mr. Seldes and other alarmed critics) is to deal with these largely unsupported claims as though they were established facts.

Let's examine what Mr. Packard has discovered that has so upset him. He has discovered that marketing researchers really do something more than count noses. In their attempts to understand human behavior, they study not only the "what" and the "how many" but also what I have long referred to as "the 'why' behind the 'what.'" Any number of competent researchers have been doing this for a long time. Recently, however, they have been joined by some rather dazzling operators who have impressed industrialists by a concoction some two parts research, three parts high I.Q., and in some instances five parts chicanery. This kind of "research" as well as sound research that concentrates on the "why behind the what" has come to be known as Motivation Research, and Mr. Packard devotes most of his book to reporting the tinsel and glitter from this field.

In justice to Motivation Research, let me say that in the hands of responsible and competent researchers, it is often productive. However, findings from MR should, in nearly all instances, be considered as hypotheses on which more definitive research may be based. Chicanery enters the picture only when MR reveals a hint which, backed by the researcher's hunch, gets blown up and misrepresented as a major finding applicable to a significant part of the population. Motivation Research, as the term is being loosely used today, is all too often not research at all, but the hunt for hypotheses on which research might be based.

Many thousands of research and advertising dollars have gone down the drain because pitch men have sold ideas out of MR which might appeal to seventy-two people as if they would certainly appeal to seventy-two million people.

Packard has spent a lot of time talking with a number of MR researchers who, in my opinion, range from good to bad. He seems to have spent most of his time where I would suggest that he should have spent the least. He has recorded what he found out, and what he thinks about it, in his book "The Hidden Persuaders." In it he recites, with what I regard as considerably too much trust, the tricks, devices, and formulas by which, he fears, the American people are being mesmerized, hoodwinked, and "mass psychoanalyzed" into doing what a few industrialists, advertising men, and politicians want them to do. He sees this whole trend as straight out of Orwell.

Packard says: "But certainly our expanding economy can manage to thrive without the necessity of psychoanalyzing children or mind-molding men or playing upon the anxieties we strive to keep to ourselves. America is too great a nation—and Americans too fine a people—to have to tolerate such corrosive practices." In my opinion, Mr. Packard can take heart. The American people, I suspect, are less helpless, less docile, altogether less congenial to being pushed around than he fears.

Here are several points that seem worth noting:

1) Far from being "hidden persuaders," the people who provided many of the "success stories" reported by Packard are eager for publicity—so eager that many of the "successes" reported are completely unconfirmed by the only ones who could confirm them: namely, the clients who have access to the sales records!

2) It would be highly instructive to know how many of the bright ideas, reported uniformly as having been applied successfully, were actually ever tried, and how many of those that were tried were successful.

3) The loose use of the term "psychoanalysis" is unfortunate. Psychoanalysis is a medical-psychological term referring to a particular kind of therapy which takes a long time and costs a lot of money. Since it is basically devoted to discovery of the self, it is not manipulative. No reputable therapist even speaks of the possibility of "mass psychoanalysis."

4) Similarly, Packard has become hypnotized with the term "hypnosis"—as applied to shoppers in supermarkets, for example. Packaging can surely be attractive and even fascinating without wrenching this attractiveness into the sinister connotations of hypnosis and compulsion. Many people still buy a certain gasoline because they have found Brand X good, or filling station Y pleasant and convenient—not because the pumps are a phallic symbol. Many men still smoke cigars because they enjoy them, not because they were denied breast feeding as babies.

WE HAVE had cycles of crises in public opinion and marketing research. Economists, political scientists, statisticians, sociologists, and semanticists have each taken their turn in adding to our "know how," and at each stage a few enthusiasts have thought that their contribution was not merely a contribution but the whole thing. The clinical psychologists have recently been adding to our understanding, and Mr. Packard appears to have tumbled unsuspectingly into the midst of the more lurid wing of these newcomers. What he has seen as a sickening slide into the arms of Big Brother is only the garish side of our current steps toward a better understanding of why people behave as they do. In this cycle, as in earlier ones, we have been getting some new ideas, we have been getting some old ideas confirmed, and we have been getting about our regular quota of blue sky and gobbledegook.

Packard seems to see the entry of social science techniques into advertising and marketing research as the loosing of an efficient and devasting weapon upon an innocent and unsuspecting public. But the techniques are not that good, nor is the public as naive as he fears. If our competitive capitalism sometimes breeds rough play, it is worth remembering that today the accepted theory is that the contest is in courting the consumer—not coercing him.

So take heart, you foes of Big Brother! The results of Motivation Research, while very helpful in certain situations, are not as good as represented. And their success is often in *inverse ratio* to the size of the claims made for them.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Saturday Review

Editor: Norman Cousins
Publisher: J. R. Cominsky
Associate Editors: Harrison Smith, Irving Kolodin

Book Review Editor Raymond Walters, Jr.
Feature Editor Peter Ritner
Science Editor John Lear
Poetry Editor John Ciardi
Editorial Production Dorothy Chadbourn

Editors-at-Large
Harrison Brown
Joseph Wood Krutch
Walter Millis
Elmo Roper
John Steinbeck
Francis Henry Taylor

Contributing Editors
Cleveland Amory
John Mason Brown
Henry Hewes
James Thrall Soby
Horace Sutton
John T. Winterich

Chairman, Editorial Board Henry Seidel Canby
Associate Publisher W. D. Patterson

Contents Copyrighted, 1957, by Saturday Review, Inc.

Smudging the Subconscious

WELCOME to 1984. A new company has just been formed with offices in New York for the purpose of promoting a new invention designed to get at the sources of human motivation. The invention, for which a patent has been applied, is supposed to bypass the conscious intelligence and deal directly with the subconscious. The device thrusts images or messages onto a motion picture screen or TV grid. The images are invisible to the human eye. They are "subliminal"; that is, they are beamed into the mind below the threshold of awareness.

The precise workings of the mechanism are being kept a secret, pending the issuance of a patent. Its inventor has revealed, however, that the device is based upon high-speed projection of messages that are superimposed upon regular film. The device is not able to transmit elaborate messages; it is limited at the present stage of development to a slogan or the name of a product. A message is flashed at five-second intervals throughout the entire length of a performance.

The promoters hope to be able to convince television sponsors of the feasibility of invisible commercials. The advertiser is offered substantial advantages over the present system: He can flash his sales message throughout an entire program instead of being confined to the customary spots. He can come before the public with supposedly painless advertising that the individual doesn't even see—advertising that does not interrupt the course of a play or a sports event or whatever.

The promoters of subliminal projection claim they have proof that their invention works and is ready for commercial use. They point to several tests, for all of which they claim success. In one instance, they operated the device over a period of weeks in a motion picture theatre. The invisible message told the audience to eat popcorn. Popcorn sales jumped sharply during the period of the test without the audience being aware that its subconscious had been prodded. Another significant test, carried out by another firm, involved an attempt to affect judgment. A man's face was shown on a movie screen before two different audiences. His expression was neutral. Before the first audience, the word "happy" appeared invisibly underneath the man's face. Before the second audience, the invisible word was "unhappy." Each audience was asked to vote whether the face it had seen was happy or unhappy. The audience voted preponderantly in accordance with the instructions that had been rifled into its subconscious.

Question: if the device is successful for putting over popcorn, why not politicians or anything else? If it is possible to prompt the subconscious into making certain judgments of human character, why wouldn't it be possible to use invisible messages for the purpose of annihilating a reputation or promoting it? The sponsors of the gadget are not unaware of the dangerous uses to which it might be put and they themselves have suggested that an audience be informed when it is being subliminated and also that the nature of an invisible message be made known before or after a program. They have also suggested the possibility that government regulation of one sort or another might be useful.

There is only one kind of regulation or ruling that could possibly make any sense in this case; and that would be to take this invention and everything connected to it and attach it to the center of the next nuclear explosive scheduled for testing. At the very least, the Federal Communications Commission should act in the public interest to prevent the device from being used on television, even though the owners would promise to inform viewers when and how they were being subliminated. As for motion-picture audiences, specific Federal laws may be necessary.

No doubt the inventor of the device and his business associates are sane, decent, pleasant, family men. They would not knowingly stick their fingers into a neighbor's eyes or put ground glass in his food. But they coolly propose to break into the deepest and most private parts of the human mind and leave all sorts of scratchmarks. The subconscious mind is the most delicate part of the most delicate apparatus in the entire universe. It is not to be smudged, sullied, or twisted in order to boost the sales of popcorn or anything else. It does not exist for the convenience of ingenious and invisible pitchmen.

NOTHING is more difficult in the modern world than to protect the privacy of the human soul. We live in an age where what we don't see and don't know can hurt us. It's serious enough to have to contend with the submicroscopic radioactive bullets flying crazily through the air without having to worry about contamination by sublimination.

Our predicament is not the fault of the scientist or the promoter alone. The stain is on all of us. We have made the mistake of adjusting ourselves to all sorts of intrusions, violations, and assaults. We have surrendered our privacy without a fight. We have made our peace with artificial thunder and permitted ourselves to be pock-marked by hob-nailed nonsense. Distraction is king. Yet surely the mind must have enough respect left for its own sovereignty to bar the way to further invasion. An open declaration of war can no longer be delayed against those who view the integrity of the inner self largely in terms of the movement of merchandise. The individual who is the target of the motivation manipulators had better look to his artillery.

—N. C.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LETTERS TO THE EDITOR

WHY THE TIMIDITY?

THE ANSWER TO the question in the title of Bruce Catton's article, "Is America Hospitable to Writers?" (*SR* Sept. 7) seems to be no. The author in his revelations pictures conditions exceedingly difficult for a writer today. Why, then, does he conclude his essay by the assertion that "the American writer today operates in a fairly hospitable environment?" Why the happy ending? Why the timidity? Why does Mr. Catton feel it necessary to be gentle with the age we live in?

THOMAS H. UZZELL.

Stillwater, Okla.

MR. FAITH McNULTY

I HAVE JUST read Sam Boal's captivating review of "The World of John McNulty" (*SR* Sept. 14) and am reminded of an experience I had with McNulty a few years ago when, as managing editor of the *Ford Times*, I was in New York visiting author's agents in the hope of finding a writer who could do us a short piece on South County, Rhode Island, in a hurry.

In the office of Harold Ober Associates, Anne Louise Davis suggested Faith McNulty, who is John McNulty's wife (now his widow). Miss Davis suggested that I telephone Mrs. McNulty at five that afternoon, when she would return to her home after her day at *The New Yorker* office. This I did, and a man with a fine, unmistakably Irish voice answered the phone.

"May I speak with Mrs. McNulty, please?" I asked.

"This is Mrs. McNulty."

"I want to speak to *Faith* McNulty," I said.

"This is Faith McNulty," said the man. "I hear you want a piece for the *Ford Times* on Rhode Island. Is that right?"

"Yes."

"Is it true that you will pay $250?"

"Yes. I would like to ask Faith McNulty if she will do the story for us."

"This is Faith McNulty, and I have just written the piece. Do you want it?"

"I don't know. I haven't read it."

"I'll read it to you over the phone."

"No. Send it to me."

"Do you want the piece, or don't you want the piece?"

"I have an idea I do, Mrs. McNulty," I said. "But if you read it over the phone, I will be buying a voice, not a manuscript."

"Very well. I shall now read the piece."

There was then the sound of "Mrs. McNulty" shooing children away from the phone at the McNulty end, and then the voice reading the Rhode Island story. At the conclusion of the reading, "Faith McNulty" said:

"Well, how did you like it?"

"It sounds swell. But I don't know how it will read."

"Do you want it, or don't you?"

"Yes. I want it, Mrs. McNulty."

"Psst!—Pepe—everything's been fixed—the bull's on' tranquilizers."

"For $250?"

"Yes. To whom shall I have the check drawn?"

"John McNulty. And I'd like to get it soon. I have been playing the horses."

"Mrs. McNulty," I said, "from now on, why don't you bet on editors instead of horses?"

"Horses," said the impersonator of his wife, "are more reliable."

I never met John McNulty, except through this phone call. The Rhode Island piece was duly published, and I can still hear the voice of its author. I have always regretted that I had to decline his invitation to "come on over here and have a drink."

EDMUND WARE SMITH,
Managing Editor,
Ford Times.

Damariscotta, Me.

SR SELF-DEFEATING

Is *SR* (Sept. 14) justified in deploring the conditions (bad schools, low pay for teachers, conformity, "beat generation") which inspire nearly all of its copy? If these conditions did not exist, *SR* would have no more to offer than the book and record reviews. Were the choice of topics for this issue atypical, I would not complain, but every *SR* that I chance to read seems to contain the same remarks about the American scene. It is not the truth of these remarks that I question. I only wonder whether it is worthwhile to repeat them so often to your audience.

ELIHU RICHTER.

Paterson, N.J.

BARGAINING TEACHERS

THE FAILURE to pass the Federal Aid to Education bill is just another example of society's refusal to foot the just bill. Unlike doctors and lawyers, teachers do not set their own salaries or working conditions. As professionals they are closer to the needs of professional musicians, actors, and engineers. And more and more teachers are feeling that advantages which head in the direction of making teaching more effective and attractive will have to be won over some kind of bargaining table.

ISRAEL KUGLER,
Vice President for the Colleges, Local 2—New York Teachers Guild, American Federation of Teachers, AFL-CIO.

Long Island City, N. Y.

IMPOSSIBLE WAR

YOU MIGHT care to reprint this:

> I hear that Sir Hiram Maxim is dead. That news recalls to mind my only personal impression of the man to whom we owe the deadliest of all deadly machines which are now destroying the populations of Europe.
>
> It was more than thirty years ago and we stood around Maxim as he explained the mechanism of his gun and demonstrated its marvellous qualities. I still see the mild and childlike air, so often marking the man of genius, the modest yet self-satisfied smile, with which he deftly and affectionately manipulated his beautiful toy. As we looked on, one of us asked reflectively: "But will not this make war very terrible?" "No," replied Maxim confidently. "It will make war impossible."
>
> So it is the dreamers, the children of genius, who for thousands of years have been whispering into the ears of Mankind that insidious delusion: *Si vis pacem para bellum.*

—HAVELOCK ELLIS, in "Impressions and Comments."

ROBERT ARMSTRONG ANDREWS.

Edisto Island, S. C.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

BROADWAY POSTSCRIPT

The Cool Generation

"West Side Story" is not so much a musical as a ballet-opera. It uses dance-acting and rhythm to such an extent that the words and singing seem almost incidental. In it choreographer-director Jerome Robbins establishes from the beginning a vocabulary of dance gesture and movement so that we soon tend to be unaware of the shifts from naturalness to stylization. And his talented cast of hard-working performers achieves some remarkably precise results with a portrayal of two teen-age gangs on New York's immigrant-jammed West Side.

The plot of the musical is inspired by "Romeo and Juliet." Romeo is Tony, a young man who has outgrown the adolescent gang he used to lead. Juliet is Maria, a lovely young Puerto Rican. Mercutio is Riff, the leader of Tony's old gang "The Jets," and Tybalt is Maria's brother, Bernardo, leader of the outfit called "The Sharks." Faced with the problem of wedding Italian legend and modern violence (the same task Arthur Miller attempted in "A View from the Bridge") writer Arthur Laurents has wisely chosen not to follow Shakespeare's plot slavishly, though even as it is the parallels sometimes seem more arbitrary than intriguing. Rather he concentrates on expressing the realities of an alarming contemporary situation.

As an observer Mr. Laurents has managed admirably. He puts an amazing amount of teen-age jargon on-stage without forcing it. And, more importantly, he penetrates the problem of juvenile delinquency in a way that should give all of us pause. From the beginning he faces the hard fact that today's teen-ager, who alternates between purposeless violence and sullen detachment, cannot really be explained by use of specific phrases like "insufficient housing" and "broken homes." Rather, he implies that adults' sins of omission on the highest level of national and international policy create the vacuum which these teen-agers feel obliged to fill with cool and fierce bravado. Someone asks, "Do you know the difference between being a stool-pigeon and cooperating with the law?" Let's all answer that one satisfactorily if we want our children to be law-abiding.

A second and even more essential unanswered question is hinted at when the Jets decide that the growing proportion of Puerto Ricans in the block demands an all-out attempt to destroy them before they become too powerful. Later, when the rival gang leaders agree to have a war council, their terse summation "no jazz before then" is a capsule Cold War. And the discussion of weapons they will use in their forthcoming rumble is as ridiculous and at the same time terrifying as are most disarmament conferences. For when the rumble does start each side produces more destructive weapons than it agreed on so as not to be caught short.

The character of teen-age gangs is brilliantly expressed in two numbers. "Cool" paints in song, dance, and dialogue the juveniles' necessity to hide their emotions and feelings behind an artificially relaxed appearance. It is a recognition of the sad adult truth that the emotional and insistently sincere person tends to lose all arguments, and that we live in a time when ignorance and insensitivity come close to being the prerequisites of success.

Then, in Act II, comes a number which brings out the best in composer Leonard Bernstein, lyricist Stephen Sondheim, and choreographer Robbins. We are treated to a sarcastic impromptu dramatizing the absurd rigmarole that ensues when juvenile delinquents are brought into custody. The notions that playgrounds "keep deprived kids off the foul streets" or that they are psychologically "distoibed," or victims of "a social disease," or marijuana-puffing fiends are devastatingly mocked. And the final line of the song, which sounds like, "Officer Krupke, f--k you!" is audaciously appropriate. Just as shocking but less sensational is the first-act curtain, which comes down on a stage whose only remaining occupants are the two dead victims of a meaningless switch-blade battle.

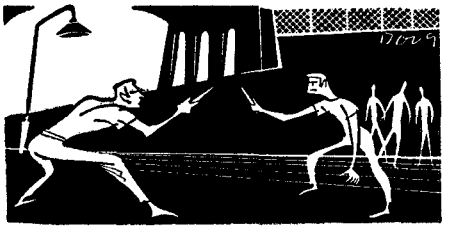
The Puerto Rican situation is a touchy one to present and "West Side Story" does it without direct sermonizing. True, it does not emphasize the utter squalor in which many Puerto Rican immigrants live. But "America," sung and danced with tough-minded efficacy by Chita Rivera, nicely describes the Puerto Rican's attitude towards his plight. While the show refrains from prettifying the situation, it does gain sympathy for the Puerto Ricans by showing the cops to be more viciously prejudiced than their gang-enemies, the Jets. And if the show fails rather badly when it tries to show a non-prejudiced utopia "somewhere" it leaves a telling reminder for us at the final curtain, when we see the two gangs temporarily allied against the law enforcement officers.

Mr. Robbins's contribution easily outdistances those of his nearest collaborators. Mr. Bernstein is an able and intelligent craftsman. But when his music is sad it seems tired, and when it is gay it seems nervous. "Tonight" starts out as a haunting melody in the tradition of Kurt Weill's "The Hills of Ixipu," but loses distinction when it becomes more complicated. "I Feel Pretty" is a consciously cute number whose final phrase is reminiscent of "I'm in Love with a Wonderful Guy." What this young composer needs is to relax and give himself more deeply and quietly to his work. Mr. Sondheim's lyrics only occasionally rise above adequacy. And Mr. Laurents, the dramatist, is often guilty of making the action too pat and explicit. When a girl must face a lover who has just killed her brother the moment requires awe. Instead, Mr. Laurents fills it with logical statements about what has happened and an estimate about the future.

THE performances serve the show well. You will not forget the new faces and disciplined physiques at work in "West Side Story." Chita Rivera and Lee Becker are particularly memorable, and in the two leading roles Larry Kent and Carol Lawrence make love-at-first-sight credible. Olive Smith's settings are most impressive when they are stylized, but one is slightly bothered when a stylized fire escape is brought into the same scene as a realistic store or bedroom. However, the setting under the West Side Highway is a beauty.

While "West Side Story" is something less than a great or even a terribly moving piece of work, it is worthwhile for its exciting use of dance vocabulary and the intelligence it applies to its vital subject matter. If the show falls short of being all that it should be, it is still the best treatment of the juvenile-delinquency problem in our theatre to date. And technically it is a step forward for the use of dance on our musical stage.

—HENRY HEWES.



PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SR GOES TO THE MOVIES

Hollywood and the Festivals

VENICE, ITALY.

SHORTLY after the screening of "Something of Value," one of the Hollywood entries at Venice this year, the Japanese representative said to the American with that extraordinary Oriental tact and diplomacy, "It's so good of your people to send to these festivals only your second-best pictures. It gives our studios a chance to win." Actually, Hollywood did end up with one of the four major prizes this time—an acting award for Anthony Franciosa in "A Hatful of Rain." But more important than any awards, for the first time Hollywood was officially represented at Venice this year: In place of the usual man from Washington, the State Department briefed and accredited a top Hollywood producer, William Perlberg, as on-the-spot observer and spokesman for American production.

What Perlberg saw was a Festival that the Italians themselves agreed was *brutto*, a string of fourteen films of which less than half a dozen merited serious consideration—pictures from Mexico and Yugoslavia that were primitive beyond belief, a pair from Japan that fell substantially below the high standards set in previous festivals, films from Spain, England, France, and Italy that might most charitably be described as run-of-the-mill. The reasons, he soon found, were twofold. Earlier festivals in Cannes, Berlin, and Karlovy Vary had already skimmed much of the cream from the world's slim annual supply of truly distinguished films. But no less important, in many instances the governments or trade organizations had themselves chosen the entries and presented the Festival authorities with a "this or nothing" alternative. After a viewing of the German entry, the Festival people chose the latter—and Germany was conspicuously absent from the Venetian scene. The Russians, surprisingly tractable, substituted "Malva," a rather literary adaptation of a Gorki story but unblemished by propagandist effusions, when their first choice was rejected. Other countries, however—including our own—sent pictures that were far from distinguished, and then exerted various pressures on the Festival authorities to have them included. The Festival itself, for example, had invited "Hatful of Rain" but was informed by the Johnson Office that it could run "Hatful" only if "Something of Value" were also shown.

One can only imagine that economic considerations dictated this choice. Films shown at the Venice Festival come into Italy free of quota restrictions and the money that they earn is remitted directly to the producing company—two very real advantages. Certainly the choice was not made with any recognition of how a sophisticated Festival audience, predominantly European, would hoot at the film's naive suggestion that Mau-Mau difficulties could be solved if only Rock Hudson and Sidney Poitier would shake hands. Some laughed, many were irritated by the simpleminded Americans poking their fingers into a subject far too complex for them—or at least for their film makers.

Unlike the Europeans, who hope that an award will enhance the cash value of their pictures both in domestic and foreign markets, the Americans gain relatively little from prizes themselves. With their own distribution facilities throughout the world they are assured of profitable screen time, and audience interest in Hollywood's features is always high. But American prestige is something else again; and Mr. Perlberg, from his unique vantage point, saw at Venice the need not only for our best films but our best face. He left the Festival with a number of ideas and recommendations which he has promised to place directly before the industry to bring this about. It will be a major accomplishment if he succeeds.

* * *

Youthful Michael Cacoyannis was first recognized at Cannes last year—and with him, the very existence of a Greek motion picture industry. His latest film, **"A Girl in Black"** (Kingsley), confirms the strong impression made by "Stella" at that time. In this surcharged story of love and hate and bitterness in a small island village, Cacoyannis catches to perfection the special distillation of meanness and pettiness that seems to be so much a part of island living. His feeling for the subtleties of human relationships is superb; and his work is enhanced throughout by the dexterity of Walter Lassally's camera and, most of all, by the quiet, classic beauty of Ellie Lambetti in the title role.

—ARTHUR KNIGHT.

RADIO CITY MUSIC HALL
Showplace of the Nation
Rockefeller Center • CI 6-4600
"LES GIRLS"
Starring
GENE KELLY
MITZI GAYNOR
KAY KENDALL
TAINA ELG
Co-Starring JACQUES BERGERAC
Music and Lyrics by COLE PORTER
A SOL C. SIEGEL PRODUCTION
Directed by GEORGE CUKOR
An M-G-M PICTURE
In CinemaScope and METROCOLOR
ON THE GREAT STAGE
"CONFETTI"
Produced by Russell Markert, with the Rockettes, Corps de Ballet, Choral Ensemble . . . and "KOL NIDREI" with Symphony Orchestra, under the direction of Raymond Paige.

YOU CAN PUBLISH YOUR BOOK
Free brochure tells how we published 2000 books for authors. Free editorial appraisal. Write Dept. SR-10
EXPOSITION PRESS / 386 4th Ave., N.Y. 16

RATIONALIST PRESS ASSOCIATION
(Bertrand Russell, Pres.)
invites inquiries regarding activities of Local Chapter. Free information, literature from Local Secretary E. L. Gruber, 162 West 86th, New York 24.

MEMO TO WRITERS:
The priceless ingredient in every book is the integrity of the publisher. If we are convinced of the quality and sales potential of your manuscript, we will offer you a fair cooperative contract. Publication will be handled by men of vision and experience. Submit your manuscript to:
THE AMERICAN PRESS
Attn: Mr. Saunders, 489 Fifth Ave., N.Y., N.Y.

WANTED: That once in a lifetime find. A comfortable apartment at a VERY reasonable rent. Young executive secretary desires clean, compact quarters, convenient to mid-town Manhattan, New York. Box XY-400.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TV AND RADIO

Incitement to Riot

A SHORT time ago Miss Marya Mannes, of *The Reporter*, and I were on Richard Heffner's program, "The Open Mind" (NBC in New York and WGBH in Boston), and we were asked to answer a question which has been troubling Mr. Heffner for some time. He conceives of his program as a discussion, a search for truth—and the only time he gets any reaction in the press is when his subject matter is "exciting" (homosexuality, race prejudice) or when the disputants grow angry as Dr. Fredric Wertham did, rather finely I thought, in a discussion of the mass media and delinquency. Mr. Heffner wanted to know whether the critic-reviewers might not be creating the atmosphere of crude excitement, whether the quieter programs, such as the one we were on, weren't more useful and more worthy of our consideration. At which, I fear, I became disputatious.

It is true that many programs presumably devoted to clear discussion of important questions live by the superficial excitement they work up, and that questions are asked not so much to throw light on a subject as to generate heat before the cameras, not to interest the mind so much as to excite the senses, to satisfy our all-too-human satisfaction in a good brawl. The pattern for panel-shows in entertainment is pretty rigid—a knowledgeable fellow and a jester for the two men, a sweet and an acid temperament for the women—and the pattern for controversy is almost as fixed: two violent propagandists on each side, one of them a concealed bigot if possible. Clash! Sparks! Success!

The point I made was by way of a quotation from a short essay Arthur Schlesinger, Jr., wrote in *SR* some months ago: the media of communication tend more and more to the middle way, to saying nothing that will give offense to anyone, so that presently we shall have nothing but "the bland leading the bland." You see the same phenomenon in the interview programs where Edward R. Murrow, who has himself protested eloquently against turning TV into an opiate, is the most conspicuous offender (in the all-too-smooth, ever-so-innocuous "Person to Person"). People were offended by Mike Wallace's impertinent and embarrassing digging on his early "Night Beat" show, but the programs added a new sound to the air. It did something else, too.

It proved that the program-makers could not entirely kill off one of the most precious capacities of the television apparatus—its power to reveal the nature and character of human beings. What I called a "rasp" Miss Mannes called "roughage"—and we agreed that to preserve this quality some sacrifice of courtesy was justified. We are turning discussion programs on television into a bear-pit or an arena—but we are doing it because the tendency has been to turn them into social teas, the kind celebrated in English song as most delightful when "the vicar came and brought his tiddle-de-winks."

There is, to be sure, a kind of vulgarity about some of the news-and-discussion programs on which the Congressional or Executive victim is often impaled—and actually some of the tone has gone over into the President's press-conference where, clearly, the intent is to embarrass more than to elicit information on policy. But in the mass media at least, a smug conformity is a greater danger than a bit of bad taste—in particular if the fear of bad taste rises not from dislike, but from apprehension about what pressure groups and individuals may do. The public arts are intimidated media, and we critics are right to applaud every gesture of defiance, even if it looks at times like a scruffy bad boy thumbing his nose.

Between us Miss Mannes and I developed another point. Her point of departure was that the entertainment programs, six nights a week, also shunned controversy, leaving it for Sunday. Mine was that the appetite for the intellectual exercise of following a controversy was being killed off during the week and would hardly survive by the Sunday gymnastics. Here Chet Huntley, of the NBC newsstaff, was with us—and rather on Mr. Heffner's side at the same time, because he felt that the rules of debate had gone by the board, that no one tried to answer an adversary, only to demolish him.

And while we talked we were beset by one of the pitfalls of the business. We were in earnest and we were trying to persuade one another, but each of us was aware of the passage of time, of the necessity to allow the others their innings, and we (especially myself, I confess) were making our points emphatically, saying perhaps a little more than we meant to put our points across quickly.

IN THIS we recognized, I think, something of the nature of TV discussions. The element of hostility, the use of catchwords or highly colored phrases, are really parts of the production technique. We all knew that if we let down and if there were something faintly exciting on another station our audience would leave us. (We had, as it happened, an audience watching us from the street, and it dwindled markedly—but it was a sultry day.) In a sense I think a program cannot be too highminded. It asks the attention of the audience and ought to use all the legitimate techniques to keep that audience. Making a meeting of minds into a battle-royal may not be legitimate—but letting the opposition between ideas come sharply into focus certainly is.

I think Mr. Heffner's worry about his program is unfounded. He will always generate some intellectual excitement, and if at times it isn't of the highest order he can console himself with the thought that, given a good show every so often, his listeners will return to him with attention and pleasure. —GILBERT SELDES.

The Property of Saint Jerome

(After Dürer)

By Roberta Teale Swartz

DESIRES are the taint of the worldly air,
And many a saint, in a desolate lair
Has parched all day by the bone-white sand,
With eye transfixed, and motionless hand,
Nothing to read; nothing to eat!
But Jerome, courting the Paraclete,
Kept several cushions, on which he sat,
A lion of his own, and a tasselled hat.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

MUSIC TO MY EARS

The Aspiring Cranko and the Enduring Fonteyn

CREATING a full-length ballet is somewhat akin to writing a five-act tragedy in blank verse or painting a mural: there is no way to learn how without doing it. Since such works are meat-and-drink of the Royal Ballet's existence and its classic sources of subsistence are not infinite, it is understandable that it should permit such a promising young choreographer as John Cranko the opportunity to produce the work presently being seen as "The Prince of the Pagodas." It stinted nothing in providing John Piper as designer, Desmond Heeley as costumer and, above all, Benjamin Britten as composer of his first score for such purpose.

Taking a clinical view of the matter, Cranko did just about as well as could be expected. Operation Full Length was a success, even if the life-expectancy of this particular patient cannot be very long. Some of the cards were stacked by Cranko against himself, particularly in the self-composed fairytale blending elements of "Turandot," "Cinderella," "Beauty and the Beast," even "King Lear." There are, it seems, two daughters of an Emperor, the older sought after by four suitors, the younger kept in obscurity. Needless to say, as well as being younger the latter is also prettier, and a better dancer, because she is Svetlana Beriosova. When she attracts the mysterious attention of a distant Prince of the Pagodas, the Emperor placates the older by putting his crown on her head.

Act II is given over to a rambling account of the younger daughter's journey to the Kingdom of the Pagodas (everybody at the other court has a long rest, meantime). The Prince appears to her as a salamander, which is understandably repellent. She prefers him when he looks like David Blair, which, oddly, is only when she has a mask on. At the end of the act she has the mask off, and he is a salamander again. Act III finds us back at the original court again, where the older sister is living her imperial role as well as acting it, and father regrets his impulsiveness in creating her Empress. Not until Beriosova returns, followed by the Prince, who ceases to be a salamander when she perceives his Basic Goodness, are things gay again. Curtain.

Conceivably, Petipa and Tchaikovsky could have made a memorable thing of all this, but it was beyond Cranko and Britten. The former is an ingenious fellow, and not without a sense about filling the stage with dance patterns. He lacks, however, a real strain of emotion—or else he is keeping it tightly to himself—with the result that there is no real climax or fulfilled expression. Periodically the ballet has passages that are well-devised—the action for the Princes in Act I, the haughty dance for the older sister (well-impersonated by Julia Farron), the consistently good utilizaztion of Beriosova's ability to suggest aloofness and mystery. But Act II attempts the illusive without realizing it, and there is too much that is prosaic where what is wanted is poetry.

The fault, certainly, is as much Britten's as Cranko's. In a casual conversation with the composer at Stratford (Ontario) recently he described the "Prince of the Pagodas" as a harder task, utilizing a larger musical output, than any of his operas. The evidence is that it was not a particularly joyful task, for the music is piecemeal, without real continuity. The one really well-imagined sequence is in Act II, when Britten evokes a pagoda atmosphere with a mingling of bells, percussion, and chimes. In no respect, however, was it a particularly danceable score.

Piper's scenery neither disserves his reputation nor enhances it, and Heeley's costuming is, on the whole, the best element of all. The "Prince of the Pagodas" cannot be described as unsuccessful, for it eventually gets to its destination, if by rather leisurely stages, and Cranko is obviously the benefactor for having run the championship course. His next venture will show whether the Royal Ballet has put its money on a winner, or merely a long-shot.

The other novelty of the week, "Solitaire," is also the work of a young-dancer-turned-choreographer, Kenneth MacMillan. A plotless work in which Anya Linden dances a girl who does not blend well with her companions (female as well as male), it shows MacMillan beset by two long-standing problems: how to start, how to finish. Once into his balletic scheme the series of episodes (based on a suite of English dances by Malcolm Arnold) is both brisk and buoyant. The light touches, derived from Robbins and Balanchine, are never quite deft enough; in consequence, the satirical allusions remain vague and unfocussed. Linden's performance has a good deal of wistful charm, with Maryon Lane and David Blair outstanding among her associates.

Doubtless Arnold could have written better music to order than his adapted suite provided ("Homage to the Queen" and several film scores are ample testimony to his skill), but the lacks of "Solitaire" are visual not audible. Whether a choreographer is telling a story or visualizing an anecdote, his intent should be clearer than MacMillan's is here.

This year's schedule includes fewer performances of "Swan Lake" than has been customary in the past—each one, therefore, is more of an event than ever. This applies particularly to those in which Margot Fonteyn is dancing Odette-Odille, which are, in the circumstances, less than frequent. Whether she is greater in this part than as Princess Aurora in "Sleeping Beauty" is a matter of individual taste —though, so far as pure dance is concerned, it is doubtless more exacting to be two different kinds of swan (one appealing, one malevolent) than one consistent kind of Princess. To judge from the chorus of praise it evoked (journalistically), Miss Fonteyn is at her greatest, these days, swanistically. The supposition would be that infrequency lends enchantment.

With or without Miss Fonteyn (Beriosova has been her alternate), it struck me that this year's "Swan Lake" is more tightly integrated, better balanced in its supporting elements than ever. The *pas de six* in Act I is delightfully done (with Mary Drage, Brenda Taylor, and Margaret Mercier as the girls), likewise the following *pas de trios* (by Maryon Lane, Annette Page, and Brian Shaw). Even the comic interlude between Ray Powell as the Prince's tutor, Wolfgang, and the peasant girl had a brighter touch of characterization, thanks to the lively charm of Shirley Grahame. Honors would be unfairly distributed were one to omit mention of Michael Somes, who makes Siegfried a prince among men if not a king among dancers. —IRVING KOLODIN.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE FINE ARTS

Interview with Grace Hartigan

—*James Thrall Soby.*

Grace Hartigan—"remarkable talent and work."

"I HAVE BEEN reading Faulkner and listening to jazz at the same time," Grace Hartigan said, as she opened the door to the house where she was staying in East Hampton, Long Island. "It makes me feel strange." For several years I had been eager to interview Miss Hartigan, whose paintings I had first seen in 1950 at Studio 35 in New York and later that same year in the astonishingly prophetic show of younger New York artists, then unknown and now in the vanguard, chosen by Meyer Schapiro and Clement Greenberg. Since that date I have followed her progress with a growing conviction that she is one of the most personal and talented artists of her generation. This past summer I saw her two newest pictures—the enormous "Montauk Highway" and the smaller but equally brilliant "Shinnecock Canal." Their impact seemed to me formidable, and I wanted to find out more about Miss Hartigan's aims and theories.

I asked her first which artists of the past and present had meant most to her. She replied that she didn't feel particularly related to any painter, though she had learned from many. She added: "In a sense I had to make my own art history, to paint it out for three or four years. I felt I didn't have the right to freedom, but had to win it for myself. Lots of artists can assume a heritage, especially the Europeans, but I wanted to discover mine and to believe in something beyond the act of painting. I also wanted to find out whether it was necessary for a contemporary American painter to come out of the French tradition, and therefore for several years I concentrated on the Spanish masters in the Metropolitan Museum and the Hispanic Museum in New York."

I asked then why lately she had produced a number of *collages* (they had been shown a few weeks before in a Southampton gallery). "Because," she said, "the pasted-on forms let me pick images out of the world, very real and pure, with no memory associations. My 'Montauk Highway' stems from these *collages*, which are mainly of subjects that interested me when driving—in the Four Roses whisky billboards, for example, a rose is as big as a human head. Our highways are fantastic; I like nature as imposed on by man. Most of all I like to work directly from American sources and phenomena."

I asked her about her training as an artist. She has had none in the formal sense, but began by working in Isaac Muse's studio. "I learned from the late Jackson Pollock's passionately creative personality," she added, "and also from Bill de Kooning's quieter and more coherent theories." We talked for a moment of the loneliness with which American artists were so often faced in the nineteenth and early twentieth centuries. "De Kooning and Pollock," she said, "made a culture for the succeeding generation. They and people like Clyfford Still, Rothko, and Philip Guston created a contemporary sensibility for the first time in our century. The earlier painters had a harder time. Think of Ryder. He could have been a very great master if he had had more material to nourish him. The art of Pollock, de Kooning and the others is very different from what I and others do now, but it has meaning for us and is relevant." I interrupted to ask whether she had ever been to Paris. "I've never been abroad at all," she answered. "I wouldn't want to go except for a vacation. I couldn't work in Europe. For me New York is now the center of modern painting."

"In that case," I asked, "why have you come out to East Hampton to work for a year or so?" This was her answer: "Last year I couldn't work from nature and this year I can. The openness here helps me to open my paintings; the stretch and reach of the potato fields are inspiring, though you have to be wise enough to learn a lesson. It's not only Long Island. This summer I saw the dunes near Provincetown. They were staggering in scale and variety, and on top of one sat an academic painter with a tiny canvas, trying to put down all that grandeur. It was a mockery."

"Anyway," she went on, "you must avoid the danger of presuming on your own style. I feel now that I must see the full cycle of the seasons and re-experience each one. I used to think I needed the tension and anxiety of New York. Now I have enough of my own. I want to rediscover hackneyed truths. Three years ago I found nature bewildering. Today I think I can learn some of her lessons and translate them in my studio. But I mean, as I said before, nature as imprinted by man—structures, highways, billboards. Some day, of course, I'll go back to New York, but I hope with increased strength and energy to stay there."

I WAS anxious to know about her methods of working, and mentioned the habit of modern European masters like Bonnard, Gris and Braque of working on several canvases simultaneously. "I couldn't do that," she said. "For me each picture has to be faced separately, as if for the first time. I always have to work strung-up, under pressure, on a single work." By way of contrast I mentioned Bonnard's visits to the Luxembourg Museum, where he would surreptitiously retouch canvases he had finished ten or twenty years before. Miss Hartigan's beautiful face was incredulous. "The time I know when a painting is finished is when it leaves me alone," she said. "When it finally does, I wouldn't dream of touching it. I get pregnant from the image I'm working on. I live with it, dream of it, and finally the labor pains begin."

We adjourned to the Signa Gallery

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in East Hampton, where Miss Hartigan's "Montauk Highway" had recently been on display and was now stored against a wall with equally large canvases by her friends and colleagues, Franz Kline and Alfred Leslie. We somehow, precariously, got her big picture out of the pile and stared at it in the flirtatious light of late afternoon. "The idea for this picture," she explained, "came to me when driving out the Montauk Highway from New York in a state of despair. I worked for three weeks or so on the *collages* you've already seen —eight or more of them in all. I wanted every section of the final image to vibrate with life, with inner automobile feelings, the soul of a car, so to speak, with emphasis on how planes fall and are separated, in billboards, for example, and the further reaches of land. In painting the picture itself, everything necessarily changed. The lower left section, for instance, represents my impression of an embankment I went by on the highway. I like to try to make succeed contrasts of orange with green, black with white, everything in fact which I can take on as an impossibility. The idea behind the image is surface projection. I don't believe at this moment in working in deep space, but outward so that the painting vibrates out, as does the painting of de Kooning, Pollock and Still." "Does this principle bring you near Cubism," I asked, "in that you reject linear illusions of depth?" "No," she answered, "I think if you compared Cubist pictures to those of the so-called 'New York School', you would find that they seem 'in' rather than 'out', that they still often use linear definitions of space which we reject, that we accept the two-dimensional limitations of the painter's canvas more bluntly than they and try to obviate them by other means." Later, back in her studio, Miss Hartigan said more about her technical and philosophical convictions. "It is so hard to paint details and give them meaning without obvious subject matter like people and flowers. Hardest of all is to give big stretches of pigment validity, to make them evocative, mysterious and alive, to give them a tension which the surrounding areas draw out."

WHEN we first arrived we had talked briefly of Dylan Thomas, whose widow's book was on Miss Hartigan's desk. Now we talked of other enthusiasms—of music, which she plays constantly when *not* working, of the books of D. H. Lawrence and Virginia Woolf in which she had been immersed during the summer. And something she said about Dylan Thomas' tragic life holds fast to memory—"the artist always works with an edge of despair." Remembering her resplendent new canvases and the courage and conviction with which she has solved their problems, it is difficult to equate the word "despair" with her remarkable talent and work.

—JAMES THRALL SOBY.

Your Literary I. Q.

Conducted by John T. Winterich

POLYSYLLABIC FAUNA

Here are twenty fancy adjectives that appertain to livestock with whose names everyone is familiar. Russell H. Fitzgibbon of Los Angeles asks you to assign the correct adjective to the correct critter. The ark is emptied on page 31.

1. bear
2. buzzard
3. dodo
4. eel
5. flea
6. goat
7. hummingbird
8. leopard
9. muskox
10. otter
11. rabbit
12. sea horse
13. sheep
14. snake
15. squirrel
16. swan
17. tick
18. turtle
19. weasel
20. worm

( ) anguilliform
( ) argasid
( ) buteonine
( ) chelonian
( ) ctenocephalous
( ) cygnine
( ) didine
( ) hippocampine
( ) hircine
( ) leporine
( ) lutrine
( ) musteline
( ) ophidian
( ) ovibovine
( ) ovine
( ) pardine
( ) sciurine
( ) trochilidine
( ) ursine
( ) vermiculous

Because your friends will like Saturday Review too . . .

. . . we'll send a sample copy to them WITHOUT CHARGE

TO: SATURDAY REVIEW
25 West 45 Street
New York 36, N.Y.

Send a free copy of the SATURDAY REVIEW to the persons listed below.

10-5
To
Address
City Zone State

10-5
To
Address
City Zone State

10-5
To
Address
City Zone State

10-5
To
Address
City Zone State

10-5
Your name
Address
City Zone State

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

BOOKED FOR TRAVEL

The Home of the Braves

MILWAUKEE, lately renowned as the waterside wigwam of the Braves, is not undergoing its first Indian war. Long ago it was the home of other scalpers, among them groups of Chippewas, Ottawas, Winnebagos, Mascoutins, Pottawattomies, and Kickapoos. While all these tribes have long since passed into near oblivion, Milwaukee, an Indian term meaning "gathering place by the waters," is now celebrated in widening circles as the home of the Braves.

The Braves live in the gathering place in Wisconsin where water comes in from three sides—the Kinnickinnick River, the Menomonee River and the Milwaukee, all of which flow into Lake Michigan giving Milwaukee a pleasant lakefront on which, in proper season, the present citizenry, like the past, has been known to swim, fish, and boat.

It was the French who came first to Milwaukee, after the Indians, of course, and a French historian by the name of LaPotherie has left an account of his impressions of the Pottawattomies. He recalled them as "very affable and cordial and they make great efforts to gain the good opinions of persons who come among them. They are very intelligent; they have an inclination for raillery. As they receive strangers very kindly they are delighted when reciprocal attentions are paid to them."

Although the French domination in Wisconsin lasted for ninety years, or from 1671 to 1761, there is very little that is French in Milwaukee nowadays except perhaps for a restaurant of some repute called Frenchy's and another that Frenchy opened which is called Frenchy's Fleur de Lis. The Fleur de Lis is on the lower east side, which doesn't mean what it means in New York. It occupies quarters in a fashionable pile known as Cudahy Tower and serves an immense variety of temptations including Pacific crab, Hawaiian Mahi-Mahi, Lake Superior whitefish, and New York Strip sirloin. About all that is French is the French fried shrimp unless one takes into account the bar which is called Le Bistro and is full of high-toned raillery that one might expect of a sophisticated Chicagoan or maybe a Pottawattomie. Drinks, in the proper season, are served on the open terrace overlooking the lake, and the libations available include *fraises champagne à la George V, pêches champagne à la George V*. It apparently is not a very long stretch between Milwaukee and the Champs Elysées, as Hildegarde would be the first to confirm.

In spite of the early domination of the French, and such minuscule corners of Gaul as Frenchy's establishments, Milwaukee's deepest and most lasting impression was made, to be sure, by the Germans, the first of whom were intellectuals who came during the revolutions of 1848. Among them was Carl Schurz.

The heritage left by the Germans includes a municipal tendency to print advertising signs in burlesque German, some excellent German restaurants, and four of the nation's largest breweries—Blatz, Pabst, Schlitz, and Miller. All of the beer people are pleased to have visitors come to the suds works, but the tour hours vary and it would be wise to consult a local magazine called "Let's See" for exact times. All breweries finish by offering a sample of this quaint Milwaukee handicraft. Schlitz dresses its waiters in Bavarian *lederhosen*, and Miller, injecting a whole new note into this kind of thing, employs dolls the like of which never dished up no beer in no *bierstube*.

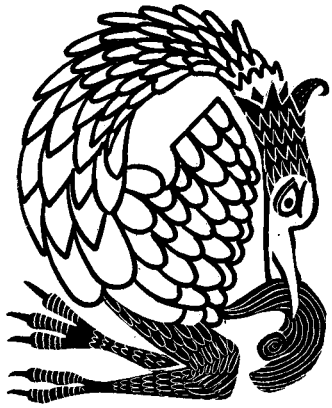
Of course there is nothing to drink *there* except maybe water, but anybody with a special interest might care to have a look at the plants which make Harley-Davidson motorcycles and Evinrude Motors. William Harley, Arthur Davidson, and Ole Evinrude were all local boys who made good machines.

In the matter of serious eating, a concern which means almost as much to Milwaukee as the pursuit of the pennant, there is, first of all, Mader's, a trim hall that began in 1902 as a winestube, and is now, in 1957, recommended by both Duncan Hines and the American Automobile Association, and was recently voted first in Wisconsin and eighth in the nation in the Dartnell Restaurant Popularity Poll. I mean, that's progress. Besides that, the food is good, served by ladies in dirndls who fetch koenigsberger klops, schweinhenkel, speckbraten, hasenpfeffer, kalbshaxen, and other dainty ballast. All this is made by women, the chef being Kate Mader who has been at home on the Mader range for thirty years, having in the course of that employment been married by the boss's son. They met in the kitchen under the shadow of a side order of schweinhenkel.

The favorite dish at Mader's is pork shanks, a special cut of pig which must be bought from the butcher in large lots. Mader's sometimes keeps 50,000 pounds of it in the freezer at one time, and once flew 80 shanks to Detroit and served them at a banquet in the Motor City, an orphan among the metropoli with no Mader of its own. Mader's den on Milwaukee's North Third St. is not decorated brauhaus brown, having been made as cheerful as a regimental choir from the force of Attila the Hun. Halberds and shields adorn the walls and sprinkled hither and yon are parts of a priceless collection of Teutonic armor which dates back to the time of King Frederick Barbarossa. Much of it comes from the castle of Bebenhausen in Wurttemburg, Germany.

When Mader's first opened in 1902 it had no Teuton armor, but its signs offered "Fine Warm Lunch Day and Night" and it urged the passersby to try dinner or supper either of which went for twenty cents, or six tickets for one dollar.

THE Mader owners are very friendly with their biggest competitors, the proprietors of Karl Ratzsch's, which calls itself "The Nation's Famous Old World Restaurant owned and operated since 1904 by the colorful Ratzsch family." While Ratzsch's does not carry the seal of Duncan Hines, it owns the award from Holiday Magazine whose professional eaters were apparently able to beat their way through a burpless meal from its kitchens. While there isn't a stick of Teuton armor in the place, Ratzsch's is up to its rafters in old glassware some of which is over 300 years old. One set of goblets was given to the American Ambassador to Austria by the Emperor Franz Josef, and how they got into the hands of



PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Ratzsch's is a matter I would rather leave to Cohn and Schine.

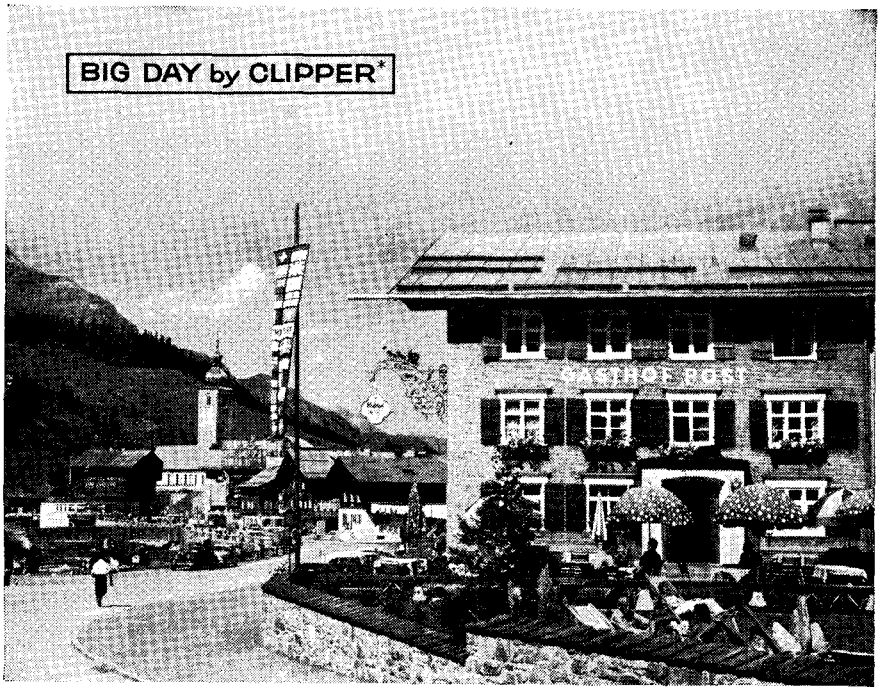
With goulash on the menu on Mondays, blue-tinted plates winking down from the walls, the Ratzsch Viennese ensemble sawing away every evening, not to mention Sunday noon as well, Franz Joseph's best glasses standing there in stately splendor, there is a certain White Horse Inn ambiance to the whole place. One could hardly be startled if Nelson Eddy, in peruke and breeches were to show up one evening amid the dumplings and *kloesse,* and bounce a cheery *lieder* off the malty walls.

As to where to rest after taking on a Milwaukee meal, things is tough. The newest of the two large hotels is the Schroeder which is pronounced schrayder, and let no *auslander* forget it. There is never any room in the Schroeder, which might be viewed as a classic example in support of the theme "Conventions Are Ruining American Hotels." When I was in residence there recently a cantonment of convening engineers shared the halls with me, cavorting in Kelly green Robin Hood hats and false whiskers and gamboling with such abandon until the small hours that I have since come to look upon engineers as a frivolous lot and now cross each new bridge with trepidation.

The other hotel, the Pfister, if it never has any rooms either, does have, at least, a singular atmosphere. It is probably the oldest living thing in Wisconsin. Its massive walls could repulse a battery of howitzers, but the interiors are more gentle, composed as they are of marble floors, bronze lions, and a lacey iron balustrade, and a gallery of 19th century paintings collected by the late Charles F. Pfister.

An impressive growth of motels borders Route 41, both south of the city on the Chicago road, and north of it, on the trail to Fond du Lac, some of them with TV in every room, a swimming pool, and twenty-four hour switchboard service. But the most impressive structure in the environs is Milwaukee County's airport, General Mitchell Field. Only six-and-a-half miles from downtown, the field offers a visitor an immaculate terminal building with doors that swing open automatically, an escalator that leads one effortlessly to the runways. Planes depart from three enclosed concourses which are called piers, and in case anybody has to wait there is an air-conditioned restaurant, a game room and a nursery. As a brochure explains, "the new terminal building was designed for the convenience of travelers." Now you have to admit, that's a new twist.

—Horace Sutton.



Legendary Inns...overnight by Pan Am

An inn becomes legendary from hospitality and food. Pan Am during its 30 years of world-wide flying has achieved the same reputation for the same reason. Fly to any of 6 continents. Pay only 10% down, using Pan Am's World-Wide Plan, Go Now—Pay Later.

England	11 hours	$43 down
Germany	14 hours	$50 down
Scandinavia	16 hours	$50 down

BASED ON 15-DAY TOURIST EXCURSION FARES FROM NEW YORK

Call your Travel Agent or

PAN AMERICAN

*TRADE-MARK, REG. U. S. PAT. OFF.

by

GEORGE HARMON

COXE

A story of murder and greed in South America

$2.95 at most bookstores

ALFRED A. KNOPF, *Publisher*

"A sightless man with a clear vision."—N. Y. Herald Tribune

NORMAN COUSINS says:

"Nowhere in the world have I met a more remarkable man. His book is enormously appealing and will be widely read."

FACE TO FACE

By VED MEHTA

An Atlantic Monthly Press Book • $4.50

LITTLE, BROWN & COMPANY

AUTHORS: TALENT GOING TO WASTE?

If you are the talented author of an unpublished manuscript, let us help gain the recognition you deserve. We will publish your BOOK—we will edit, design, print, promote, advertise and sell it! Good royalties.

Write for FREE copy of How To Publish Your Book

COMET PRESS BOOKS, Dept. SR-10
200 Varick St., N. Y. 14

"An indelible portrait"*

of a young English art student, and the love, adolescent loyalty and tragedy she inspired in a little seaside town on the Brittany coast.

THALIA

A novel by FRANCES FAVIELL

$3.50 FARRAR, STRAUS & CUDAHY

*London Times

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

—*Information Service of India.*

Mahatma Gandhi going to evening prayers.

Architect of Indian Freedom

"Mahatma: Life of Mohandas Karamchand Gandhi," by D. G. Tendulkar *(Times of India Press, Bombay. 8 vols. Rupees 180), is an extensive biography revealing the many facets of Gandhi's thoughts through his own varied writings. It is reviewed by Anand Lall, India's Ambassador to the United Nations and the author of "The House at Adampur."*

By Anand Lall

THOUGH the most spectacular achievements of Gandhi were his political triumphs it is significant that the title of his monumental work in eight volumes is "Mahatma" —the Great Soul. The Western reader might be inclined to regard the title, as indeed the Mahatmaship to which the people of India spontaneously raised Gandhi, as a manifestation of a tendency to superimpose on things and people a spiritual halo or connotation. Even to many Indians of the generation after the Gandhian era, he will be mainly the architect of India's freedom, and perhaps the three phases of the movement for independence will come to be regarded as a Gandhian pre-thought-out master plan which was bound to succeed: the first phase of which the crest was the 1919-1921 non-cooperation movement; the next phase in which the movement attained truly massive and mass proportions, and in which the apogee came in 1930-1931, beginning with the salt march to Dandi; and the final phase which led to the very door of freedom and which was marked by the individual civil disobedience campaign opened at Gandhi's behest by Vinoba Bhave and Jawaharlal Nehru in 1940 and the "Quit India" Congress resolution of 1942.

To those, however, who felt the impress of Gandhi's life and read his "Experiments with Truth" and his periodical writings, they were but one ripple of the comprehensive life of that extraordinary personality.

Tendulkar's biography lives with that richness. Had he chosen to be, in the main, an analyst or an interpreter of Gandhi he would have produced eight rather laborious volumes spinning out what has been done already by many writers, including several Americans such as Vincent Sheean and Louis Fischer. But Tendulkar has wisely adopted the technique of stringing together long examples from Gandhi's pen and lips, using his own words and thoughts only as relatively minor links. This technique gives the reader the advantage of listening to the Great Soul himself, an experience to be thankful for not only because of the satisfaction of being engaged by the first person Gandhi but because Gandhi as a writer is undoubtedly a master: his style is clear, concise, and meaningful whether he is dealing with religion or the making of sandals, politics or snakes, dietetics or handicrafts, sex or civil disobedience.

Tendulkar gives us the Mahatma's own words on what his life was about, "There is no such thing as Gandhism . . ." he said, "I have simply tried in my own way to apply the eternal truths to our daily life and problems . . . The opinions I have formed and the conclusions I have reached are not final, I may change them tomorrow . . . Truth and non-violence are as old as the hills. All I have done is to try experiments in both on as vast a scale as I could do."

But what are truth and non-violence? Non-violence is the English translation for the Sanskrit word *ahimsa* which is essentially love and respect for *all* life. That sounds simple enough, but, as a rule of conduct is it practicable? The greatness of Gandhi who, in our time, has come closer to a full expression of *ahimsa* than any known person, lies in his truthfulness in facing the facts of practical life. There is the enlightening instance of the plague epidemic at Borsad (Bombay State). The local doctor wanted Gandhi's endorsement for his campaign to destroy the infection-carrying rats and fleas. Gandhi consented, "although I believed that even plague-stricken rats and fleas were my kindred and had as much right to live." This is how he explained his decision: "One who hooks his fortune to *ahimsa*, the law of love, daily lessens the circle of destruction and to that extent promotes life and love; he who swears by *himsa*, the law of hate, daily widens the circle of destruction and to that extent promotes death and hate. Though, before the people of Borsad, I endorsed the destruction of rats and fleas, my own kith and kin, I preached to them without adulteration the grand doctrine of the eternal law of love of all life. Though I may fail to carry it out to the full in this life, my faith in it shall abide."

That was in 1935 and the incident is recorded in Volume Four of Tendulkar's work. In Volume Seven there is an absorbing record of Gandhi's thought on the same subject ten years later which must be read in full if the reader wishes to understand Gandhi's concept of non-violence. The essence of his 1945 dissertation is: "In life, it is impossible to eschew violence completely. Now the question arises, where is one to draw the line? The line cannot be the same for everyone. For, although essentially the principle is the same, yet everyone applies it in his or her own way. What is one man's food can be another's poison. Meat-eating is a sin for me. Yet, for another

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

person, who has always lived on meat and never seen anything wrong in it, to give it up simply in order to copy me will be a sin."

Tendulkar rightly conveys the impression of Gandhi as an experimentalist. The keys to the special quality of his greatness, even as an interpreter of the Hindu religion, were freedom and courage. In this work he comes alive, in his own words—always modest and often whimsical and full of humor—as the free and intrepid soul always pushing his experimentation to the farthest possible fringes of human endeavor. If the field is dietetics, then Gandhi announces quietly that, "for the past five months I have been living entirely on uncooked foods . . . green leaves in place of cooked leaves or other vegetables." If it is sex, and Mrs. Margaret Sanger is incredulous about the possibility of restricting the sex act by husband and wife to occasions when they want children, Gandhi replies, "I had the honor of doing that very thing and I am not the only one." Should any phase of the political movement go underground or conduct its activities in secrecy? Gandhi says, "Nothing should be done secretly . . . In this struggle secrecy is a sin," and of course he invariably announced to the British Government, well in advance, every campaign of civil disobedience that he proposed to launch. And when Jai Prakash Narayan, one of the then Congress leaders and now among the most respected figures in India, tried to smuggle certain documents out of his prison Gandhi, while admitting that according to the accepted canons of war Jai Prakash's action was perfectly legitimate, said, "We must realize that his method is harmful in the extreme, while a nonviolent struggle is going on. No underhand or underground movement can ever become a mass movement or stir millions to mass action." Almost everything he says is lively, crystal clear, and well worth reading: "Nonviolence is of the strongest, not of the weak . . . Good and impotent persons can never do." There is this quality of strength in all he says and does.

These eight volumes are primarily a definitive work of reference, but not just for the Gandhiphile. They will be invaluable to students of India, to those interested in sociology and politics or just in frank biography. And to the general reader looking for first-class reading they will prove stimulating and diverting.

LITERARY I.Q. ANSWERS

Column Two should read: 4, 17, 2, 18, 5, 16, 3, 12, 6, 11, 10, 19, 14, 9, 13, 8, 15, 7, 1, 20.

Sad Partition

"The Transfer of Power in India," by V. P. Menon *(Princeton University Press. 543 pp. $8.50), is an account of the partitioning of the Indian subcontinent in 1947 and the steps leading up to it. William Clifford, who reviews it, is assistant to the director of the Asia Society.*

By William Clifford

WHY did the British raj, the first authority either native or foreign to rule the Indian sub-continent from Kashmir to Cape Comorin, execute the vivisection of its proudest child into one India and two Pakistans? Was this but the last of many tactical moves to divide and rule?

There have been those who thought it was, who thought that the British administration was incapable of any alternative. In 1941, six years before independence and partition, Mahatma Gandhi wrote: " 'Divide and Rule' has been Britain's proud motto. It is the British statesmen who are responsible for the division in India's ranks and the divisions will continue so long as the British sword holds India under bondage."

If V. P. Menon's new book, "The Transfer of Power in India," is valuable in one way above others, it is as well-documented proof that Lord Mountbatten, the last Viceroy, was not an intentional agent of chaos. Rather, he was a brilliant statesman deputed by a thoroughly sincere government to solve a nearly insoluble problem.

Menon, a senior civil servant who was frequently involved in the affairs he writes about, begins his long factual account with a summary of the hesitant steps toward Indian self-rule before the outbreak of World War II. Then he recounts in detail the internal politics of the war years, including the resignation of Congress Party ministries in the important provinces, a serious political blunder, and the consequent growth of the Muslim League. The seed of Pakistan was planted and grew with such surprising vigor that by the time of the Simla Conference, in June 1945, Mohamed Ali Jinnah and the Muslim League had made partition inevitable.

Fortunately, the situation was understood by a sympathetic Labour Government in England. In a House of Commons debate on March 15, 1946, Prime Minister Attlee said that the tide of nationalism was running very fast in India and that it was time for clear and definite action. Not quite able to believe that they were not being tricked, the Congress Party remained suspicious of British intentions, further strengthening their opponents, the League.

After many futile efforts to forge a coalition that would plan the future of independent India, and upon which power would devolve, the British took a bold and momentous decision. In the Commons on February 20, 1947, Attlee said, in a Statement on Indian Policy:

> The present state of uncertainty is fraught with danger and cannot be indefinitely prolonged. His Majesty's Government wish to make it clear that it is their definite intention to take the necessary steps to effect the transference of power to responsible Indian hands not later than June 1948.

Only three months later, the new Viceroy, Lord Mountbatten, announced his plan to transfer power not in 1948, but on August 15, 1947, in a matter of weeks! Was this precipitous move not an effort to sabotage the new authorities, or at least an act of irresponsibility in the face of a deteriorating situation? Again Menon proves that the answer is no, that Mountbatten was a scrupulously impartial and even unifying force, and that the intentions of his government were the best. Everyone concerned wanted the political uncertainty to cease, and all leaders agreed that a transfer to Dominion status as soon as possible was the best solution.

The British withdrawal left to India the precious heritage of a democratic form of government. It also left a people woefully divided. What are the chances today of their resolving their differences and forming the federation that many expected in the beginning?

A few months before partition, the Premier of Bengal, H. S. Suhrawardy (now Prime Minister of Pakistan) spoke for "a sovereign, independent, and undivided Bengal." Maulana Azad, now Indian Education Minister, said: "The division is only of the map of the country and not in the hearts of the people, and I am sure it is going to be a short-lived partition." Menon concludes:

> It is never too late for men of good will to take stock of realities, for the leaders to sit down calmly and dispassionately, and together evolve some common machinery which would not merely minimize the rigours of partition but, by diminishing all sense of fear and conflict, would bring about for both countries enduring peace and progress.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

PASSAGES FROM FINNEGANS WAKE BY JAMES JOYCE

A FREE ADAPTATION FOR THE THEATER

By MARY MANNING. Preface by Denis Johnston. Already produced to critical acclaim by the Poets' Theatre of Cambridge, Massachusetts, and the Poetry Center in New York, this work opens the world of James Joyce to a wide, new audience. All the humor and emotional content of the great novel are here in a dramatic presentation that projects Joyce's own brilliant imagery and the native idiom of his speech. $3.25

SANTAYANA'S AESTHETICS

A CRITICAL INTRODUCTION

By IRVING SINGER. This book is one of the first serious analyses to be written of Santayana's contribution to aesthetic theory and criticism. The author both points out the epistemology underlying Santayana's aesthetic theory and the relationship of his philosophy of art to his more general philosophy, and suggests an entirely new tradition, free from various "unacceptable" aspects of the traditional position in art criticism. The whole not only emphasizes the importance of the aesthetic experience in Western philosophical thought; it also places Santayana for the first time in his proper niche among modern philosophers of aesthetics. $4.75

IMAGES AND THEMES IN FIVE POEMS BY MILTON

By ROSEMOND TUVE. An important analysis of the use Milton made of ancient and significant images in the themes of his five most important minor poems. "L'Allegro" and "Il Penseroso," the "Hymn on the Morning of Christ's Nativity," "Lycidas," and "Comus" are all discussed in detail, and, through Miss Tuve's sensitive readings, the central figures appear in a new and interesting light. The separate studies combine to define figurative language more closely, to set Milton's imagery in the context of modern scholarship, and to provide a critical basis for a fresh reading of the poems. $4.00

Through your bookseller, or from

HARVARD UNIVERSITY PRESS
79 Garden Street,
Cambridge 38, Mass.

CRIME AND PUNISHMENT

Victim or Victimized?

"The Face of Justice," by Caryl Chessman *(Prentice-Hall. 271 pp. $3.95), is the third of a death row trilogy in which the author, a condemned man, argues for his freedom. It is reviewed by Frank O'Leary who himself spent more than twenty years behind prison bars.*

By Frank O'Leary

THERE are many portions of this book, the third of the author's death row trilogy, which are mere lengthy footnotes to "Trial by Ordeal" and "Cell 2455, Death Row." It is more cynical, brash, argumentative and defiant than the earlier books and will probably lose the author a portion of his warmly sympathetic reading audience and provide further fuel for those who would destroy him as a symbol of evil.

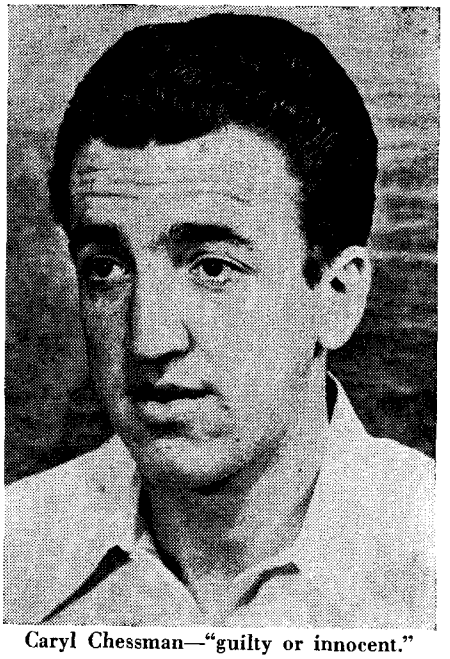
Rightly or wrongly, California has in recent years taken a dim view of allowing prison inmates to write for publication. The reasoning is that this is conducting a business venture from a prison cell, a practice which has been curbed in many states. Following the wide publicity given Chessman's first book, the legislature prohibited the publication of a condemned man's literary works until after his death. In defiance of this edict, the prisoner spirited the manuscript of "Trial by Ordeal" out to his publishers, secretly wrote "The Face of Justice" and smuggled it out mysteriously, having placed his fingerprints and signature on every page of the manuscript to prove that no "outside" ghost wrote the book for him.

The Grand Jury is currently considering whether this flouting of the law should result in one or more indictments. In the meantime, Chessman's "law cell" has been closed up, his typewriter taken away and he has been sent to solitary confinement. Ironically, an official for whom the author had great distaste, San Quentin's Warden Harley O. Teets, who has had to arbitrate his problem prisoner's frequent clashes with the prison rules and the state law, died of coronary thrombosis on September 2, 1957.

The author has devoted much space to factual and legalistic arguments in support of his claim that he is completely innocent of the acts of sex terrorism for which he is under two sentences of death in the gas chamber. Whether he be guilty or innocent, the United States Supreme Court has certainly been justified on the record in ordering that a full hearing be given the prisoner's contentions in the court of original jurisdiction. In brief, Chessman's case rests on the fact that the court stenographer who officiated at his trial died before transcribing his notes. Written in the difficult Isaac Pittman shaded characters, the notes have since been transcribed by another stenographer. Chessman and counsel argue that grievous omissions, distortions and misquotations have made this "record" worthless, thus depriving the prisoner of *due process of law* as defined in the Constitution. The transcribing reporter, Chessman says, admitted his inability to transcribe even a half page of the notes while on the witness stand.

The probability now is that Chessman will never enter the gas chamber. The so-called "little Lindbergh law" under which he was sentenced to death has recently been modified and, if the now famous convict's conviction were to be sustained by every reviewing court, it is unlikely that he would be sent to his death under the harsh provisions of law which obtained at the time he allegedly committed the offenses.

A great deal of the feeling whipped



Caryl Chessman—"guilty or innocent."

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

up against Chessman stems from the fact that one of the girls whom he is alleged to have criminally assaulted in the Los Angeles lover's lane robbery-rape-kidnappings has become an institutionalized mental case. Her mother insists that this was an end product of the attack. Chessman points out that the nineteen-year-old girl's derangement occurred nine months after the assault. Whatever this proves, it is doubtful that Chessman's defense would be strengthened by the finding.

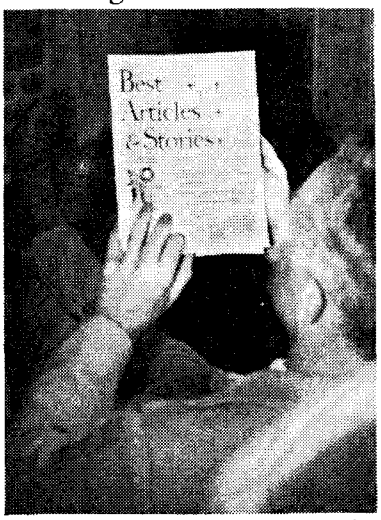
There is little doubt that the long fight in death row is telling on the author after nine grueling years. He suffers from a duodenal ulcer which has hemorrhaged several times. In his writing he becomes almost screamingly hysterical when he berates those whom he accuses of conspiring to send an innocent man to his death in the gas chamber. At one point, he strongly implies that if the Court had ruled against him in one hearing, a mysterious pair of strangers was present among the courtroom spectators ready to assist him in a desperate break for freedom if he chose to make the bid. It is unfortunate that this gifted prisoner with so delicately attuned a mind should evidence these signs of aberration.

Many of Chessman's readers, when they ask themselves if they believe in the innocence of these crimes which he so steadfastly maintains, will probably answer themselves in the words of Max Lerner: "I believe it enough to wish strongly that this brilliant, sick mind will not be snuffed out, that we will have a chance to study it, perhaps even cure it."

COPS AND ROBBERS: To the average citizen, engaged in a humdrum occupation, the job of police reporter on a big city daily would appear to be a strenuous and exciting one. Yet in **"Police Reporter"** (Duell, Sloan, & Pearce, $3.50) author Ted Prager, for forty years a much-respected police reporter for the New York *Daily News*, manages to make the job sound not only humdrum but downright dull. Though his ear has been pressed close to New York City Headquarters, Mr. Prager chooses to give no inside information, but rambles on about minor cases and pointless episodes. His is, further, one of the infuriating books which contains its few bits of autobiographical information in one of the final chapters. Mr. Prager is now assistant managing editor of the *Daily News*. It is charitable to believe that he was too busy at the city desk to devote much time to outside writing. The fact that he had a collaborator in this sorry venture shall not be mentioned. —ALLEN CHURCHILL.

(Advertisement)

Act now to receive your Numbered First Edition of this exciting new magazine—*



"Read the best—and **ALL** of it."

Last spring a group of university professors met to read and judge articles and stories for a national award. They were impressed by the excellence of material appearing in America's literary, scholarly and scientific journals not seen on the newsstands. Rating it with "the best thinking and writing of the day," they resolved it should be more generally circulated. Now, in a new magazine called "BEST ARTICLES & STORIES," selections from these periodicals - - including *Yale Review, Arizona Quarterly, Antioch Review, Child Study, Commentary, Nature, Marriage & Family Living, Sky & Telescope, Southwest Review* and 100 others - - will be published in ten issues annually and made available - - - by subscription only - - - at $5 the year. Not a digest - - material is published in full, as originally written, in a full-size magazine. Selections are from nominations of magazines' own editors. Cover a fascinating literary and reportorial terrain. A criterion of reading taste, a gift for literate friends.

*** 1st Issue Out This Month**

BEST ARTICLES & STORIES, INC.
1757 Devon Lane, Bloomington, Indiana Year's Subscription $5

Name .....
Street & No. .....
City ..... State .....

**FREE: Charter subscribers receive a personalized, numbered advance copy — Volume One, No. 1*

What Editors Say About The "Best Articles & Stories" Idea

Seldom have U. S. magazine editors given a new magazine idea the acclaim they have rendered "Best Articles & Stories."

MR. CAPPON

"It will be a great boon to all of us who can neither obtain nor afford the multitudinous magazines published . . . that is, all of us," writes Dean S. A. Nock of Cedar Crest College, distinguished editor of **College and University.** "And it will certainly be a means of making generally available some of the best thinking of the day."

Alexander P. Cappon, editor of the University of **Kansas City Review,** considers it a "worthy enterprise to circulate more widely some of the best work being published." Dr. Harold E. Fey, editor of **Christian Century,** is "impressed very favorably." Louis Lyons, curator of the Nieman Fellowships, Harvard University, and editor of **Nieman Reports** would "much like to see it done," and Mrs. Margaret D. Dawson, editor of **Child Study,** writes "I'm for it."

DR. FEY

"We are naturally very interested," said Richard W. Westwood, veteran editor of **Nature,** "in anything that has a literate objective, and that would broaden the distribution of worthwhile material." Mrs. Dorothy H. Pope, editor of the **Journal of Parapsychology,** finds it "a fine idea. Worthwhile literary and scientific work deserves a wider audience . . . the plant usually benefits from being put into a larger pot."

MRS. POPE

And so with a long list of the men and women who best know literary quality, the editors of our more thoughtful journals: "Glad to be able to read a selection of outstanding pieces just as they were written." "Covers a field and renders a service that is much needed, and provided by no one else."

MR. LYONS

"Should find an appreciative audience among people who enjoy good reading." Adjacent advertisement tells more about **Best Articles & Stories,** and provides Charter Subscription order coupon.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Fiction

Continued from page 18

and sometimes falling into awkwardness. If neither the novel nor the translation offers quite what we have come to expect from recent translations of contemporary Japanese authors, the patient reader will discover much about the Japanese at a critical juncture in their history. And he will respond to the chord the novel touches within him, the half-forgotten adolescence which haunts our adult lives.

—Earl Miner.

EDGE OF DARKNESS: William Woods, a well-traveled American, has written the strangest likely-to-succeed novel of 1957. **"Manuela"** (Hill & Wang, $3) resembles a lesser novel by Conrad, a nightmare, a corny best seller, a critical success. The heroine, Manuela, semi-primitive daughter of an Englishman, has a romantic wish to leave Bahia, Brazil, to visit her sister in England. She agrees to sleep with Mario, the ugly engineer of the "Conway Castle," if he gets her a job to work her way to England. But his ugliness and her memory of her marriage at sixteen to an old man make her break her bargain; she is protected by middle-aged Captain Prothero, falls in love with him and for three days, with a hurricane sinking his ship, stays with him in his cabin until the captainless ship has to be abandoned. After days in an open boat, she, Mario, and Prothero reach Port-au-Prince. There Manuela fulfills her bargain with Mario (Prothero is ill and regrets both his irresponsibility and his abandonment) and, presumably, after sleeping with Mario, accepts the destiny of prostitution. "There is an old Portuguese proverb: 'Take what you like,' God said, 'but pay for it'."

This summary emphasizes inevitably the limitations of "Manuela." The book is better. It is well written, intensely paced, and somehow it transcends the incredibilities of the plot. Mr. Woods transmits the edge of darkness underlying normal life that does not become apparent except in the circumstances of extreme stress which poverty, attempted rape, and hurricane make evident. For all its flaws, "Manuela" is a superior novel.

—Harvey Curtis Webster.

BRACING WEATHER: The pungent honesty of thought and style in **"The Weather of February"** (Harper, $3.50) makes Hollis Summers's third novel exceedingly good reading. This many-dimensional study of what makes a twentieth-century woman tick is uncanny, perceptive, and convincing. Mr. Summers's woman is unnamed, because a superstitious washerwoman once told her that "if your name was called out and a spider heard it, he would weave your name on a web and something terrible would happen by sundown." We do not know her name, but we know everything else about her, and are able to weave our own strands out of her deliberate understatement.

"I" am a Southerner, with my share of polished surface above enduring stone; "I" am a parson's daughter, with my normal reaction against conventional morality and organized forms of religion; "I" am generous, well-sexed, warm-hearted, human, impulsive, and vulnerable. "I" am enchanting when I am in love with Robert and he with me, and we are married. "I" am brave when he gets tired and wants a divorce. There are several other men after Robert, all of them convincingly alive, all of them different, and "I" in a new relationship to each of them.

Booth Tarkington provoked an uneasy ripple when he created Alice Adams, but his Alice was jejune and pallid compared with the heroine of Mr. Summers's book. "The Weather of February" is certainly bracing.

—Evelyn Eaton.

GROWING PAINS: Frances Faviell's second novel, **"Thalia"** (Farrar, Straus & Cudahy, $3.50), chronicles the year in which eighteen-year-old Rachel passes "that no-man's-land between childhood and womanhood." To achieve the passage many influences are needed—but none is stronger than that of Rachel's slightly younger charge, Thalia.

"Thalia is a difficult girl," her mother warned when she first engaged Rachel to act as Thalia's companion and tutor in exchange for a year's living at Dinard. Together Rachel and Thalia explore the coastal reaches of Brittany; they learn to understand and respect a few of the Breton peasants. It is only when Rachel falls deeply in love with a local Don Juan that Thalia shows her more unlovely side. For she is not only jealous of her own place in Rachel's personal world: she is doubly aware of possible hurt to her friend because of her own ambivalent love.

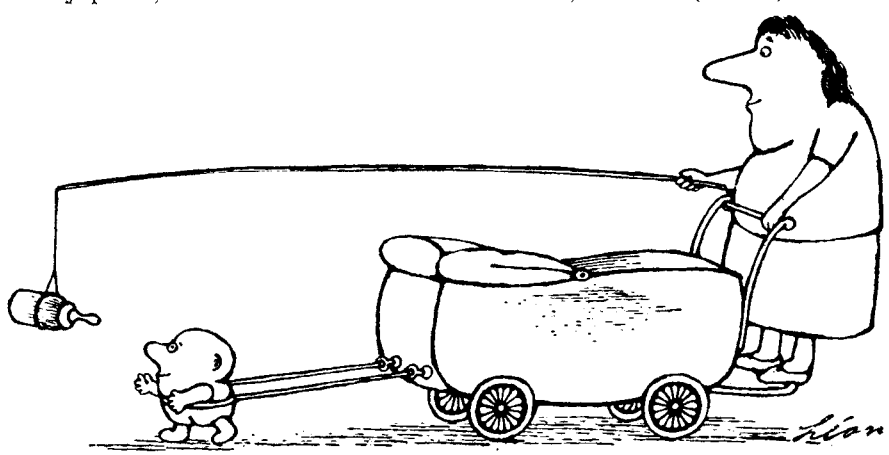
The dénouement of this year-long saga skirts the hem of tragedy. The story is essentially Rachel's despite the title and Thalia's wretched tangling with her torn family. It is only through near-death that Rachel achieves some sort of retribution for her own understandable blindness.

Mrs. Faviell showed, in "The Dancing Bear," capacities for compassionate treatment of youthful characters. "Thalia" shows a healthy growth in structure, character presentation, and style.

—Frances Keene.

TALE OF AFRICA: **"The Mask"** (Houghton Mifflin, $3.50), by Stuart Cloete is a fine story. It is a savage story, alternately grotesque and moving, built as it is around Morrdrift, the murder ford of the Nyl which lies across the road north from southern Africa. Cloete has resisted the easy temptation of making this episode of Kaffir massacres in the 1850s a background for solemnities about the South African racial horrors of the 1950s. He is more concerned with shaking the timeless ingredients of fiction—lust, love, cruelty, comradeship, the growth of a young man, the decay of an old one—into a narrative that is technically reminiscent of such master hands as C. S. Forester, or John Buchan, or Kenneth Roberts. He surpasses the typical novel of the genre in the extraordinary abundance of unobtrusive symbolism and fantastic incident. The portraits are essentially one-dimensional, but the landscape, the delineation of Kaffir ritual, the powerful separate episodes are more than mere compensations.

When one comes to write a review, it is tempting to discard the tribute and unleash belittlement. It's a little naive, after all, just to like a book;



PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

still, there it is. "The Mask" is a fine story. —CHARLES FENTON.

THE NIGHT AT GRAUMAN'S: Al Morgan's "The Great Man" was a convincing presentation of the broadcasting world. Twenty years of radio work had given Mr. Morgan the background for this mixed tribute; now, after one year in Hollywood, he has tried the same treatment on the movies, and it hasn't come off. His newest novel, **"Cast of Characters"** (Dutton, $3.50), is actually six sketches and stories, loosely hung on an all-purpose frame —the televising of the premiere (at Grauman's Chinese, to be sure) of "Confederate Gray," attended, in one way or another, by the characters.

In spite of the up-to-date surface and details, there's a curiously old-fashioned quality to the book. The reader is returned to another, simpler age—say, thirty years ago—an age in which the Slice of Life and the Well-Plotted Short Story vied for public favor and shared the necessity for a heavily ironic finish.

There is, for instance, the story of the old man who takes the part of a clown in the commercial accompanying the telecast. He is really a famous old vaudeville performer, sick and retired, disappointed in his life and in his son—who is (wow!) the producer of "Confederate Gray"! The course of the commercial obliges this antique to fall flat down at the end. Then . . . you guessed it. *He doesn't get up.* Heart failure. As Harry Graham put it, "There's *one* grandpapa the fewer." There is also a weak tale about an actor who buys a piece of a prize-fighter, seduces the fighter's wife, and gets beaten up by him. But that's Show Biz. One piece, "The Temporary Sunglasses," is not much as a story, but has a nice discussion of how the big money in Hollywood bogs a writer down, and describes an appalling but sure-fire method of escape. The other stories have their ups and downs, and at the end, "The crowds in the bleachers started leaving, the noise of their heels padded by the crunch of rose petals . . . The World premiere of 'Confederate Gray' was over."

In spite of some sharp jabs and some good observation, "Cast of Characters" seems to be a B quickie—strictly the bottom half of a double bill.

—D. R. BENSEN.

Pick of the Paperbacks

REDBURN. *By Herman Melville. Anchor.* 95¢. Melville's novel of sailor Wellingborough Redburn's first voyage contains themes later expanded and intensified in "Moby Dick."

SHAKESPEARE OF LONDON. *By Marchette Chute. Everyman.* $1.55. Shakespeare, as actor, director, playwright, set against the bright backdrop of Elizabeth's England.

NEW LIGHT ON THE MOST ANCIENT EAST. *By V. Gordon Childe. Evergreen.* $1.75. A distinguished archeologist's account of the birth and glory of the Near and Middle East in terms of recent archeological discoveries.

THE GREAT GATSBY. *By F. Scott Fitzgerald. Scribners.* $1.25. The reckless Twenties recaptured in a swift, often brilliant novel about a racketeer named Jay Gatsby.

GREAT AMERICAN SHORT STORIES. *Edited by Wallace and Mary Stegner. Dell.* 50¢. This anthology samples the field of American short stories from Washington Irving to John O'Hara.

SEGREGATION. *By Robert Penn Warren. Modern Library.* 95¢. A casual but keen presentation of the issues and ideas involved in the contemporary conflict in the South.

A STUDY OF INTERPERSONAL RELATIONS. *Edited by Patrick Mullahy. Evergreen.* $1.95. The individual as part of his society discussed and studied by noted psychiatrists, anthropologists, and sociologists.

THE AMERICAN NOVEL AND ITS TRADITION. *By Richard Chase. Anchor.* 95¢. The American novel as an individual work and as part of an indigenous tradition is discussed with immense clarity and considerable insight by a Columbia University professor.

THE OX-BOW INCIDENT. *By Walter Van Tilburg Clark. Modern Library.* 95¢. Nevada of the 1880s is the setting for this western novel whose adept characterizations and skilful plot raise it far above the traditional horse opera level.

THE FLOWERING OF NEW ENGLAND. *By Van Wyck Brooks. Everyman.* $1.85. Nineteenth-century writers and writing explained and explored in a notable Pulitzer Prize-winning literary history.

Morality of Space

Continued from page 10

as 1,000 years to make the jump to the stars. In that event, our first contact with super-races may be about as far away as the Norman Conquest. Indeed, I think that this is a ridiculously conservative figure; a century or two is more likely to be correct. One cannot help wondering if we will be ready for the meeting. . . .

AND what will be the outcome of that fateful event, whether it takes place on Earth, in space, or on some planet still unknown? I do not think we need fear it, except for its possible effect on our self-conceit. The insanely malevolent monsters of the pulp magazines and Hollywood horror movies are obvious self-contradictions. They would destroy themselves long before they got to us.

It would seem that nothing but good can come from contact with a really superior form of life, however strange its appearance or way of thought may be. There is one possible exception: a meeting with *too* superior an intelligence might produce a form of racial inferiority-complex like that which is supposed to have led to the extinction of some of Earth's savage peoples after they had encountered Western civilization. I am somewhat suspicious of this theory, having been outsmarted by primitive peoples enough times to think that gin and TB are more to the point there. But there may, of course, be cosmic equivalents of gin and TB.

To use Toynbee's terminology, our future depends on the response which the challenge of space will evoke. If the challenge proves too great, we will be crushed by it. If it is just right, it will be the greatest stimulus the human race has known since the navigators of the Elizabethan Age opened up the world. It may be argued that we have had quite enough of stimuli, suffering as we seem to be from the old Chinese curse, "May you live in interesting times." But that is the short-term view. Unless humanity succumbs to the diseases of its adolescence, it must pass out of its present time of troubles and achieve some kind of political and social stability. Yet that stability must not last forever, lest civilization freeze into a rigid, unbreakable mold.

Perhaps the greatest contribution of space-travel to the future—and this, in a sense, will sum up all its other consequences—is that it will restore a Sense of Wonder to the world. This is something that we seem to have lost, despite the fact that our age is the

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

most wonderful (and terrible) that history has known. It is not immature to crave for adventure and excitement, whether of the mind or the body. In the past, such adventure has been found in exploration, war, scientific discovery, and artistic creation. The first will soon have ended on this planet, the second must be ended, and the last two cannot be experienced directly by more than a small proportion of the human race.

It is hard to believe that there will be anyone on Earth who will remain untouched by the adventure and drama of space-flight. How badly we need such injections of adventure into our lives is proved by the enormous interest aroused by the *Kon Tiki* voyage or the ascent of Everest. These were variations on the basic theme Man against Nature—and both will have their analogues in space.

And where will this lead to in the long run? Perhaps to a time, some centuries hence, when only a minority of the human race will live on the planet Earth. Perhaps to a time, later still, when only a few specialists will know where it even is, among the packed and swirling star-clouds of the Galaxy. But if that time should ever come it will be no concern of ours. Minds capable of dealing with the inconceivable complexities of a universe containing perhaps a hundred million inhabited solar systems will no longer be remotely human, possibly no longer material. It will have been our destiny to have given rise to them, as earlier, long-vanished forms gave rise to us. This is inevitable, and it is folly to resent it or to imagine that we are the final goal of evolution. That goal lies out among the stars, on the further shores of the seas of space upon which we will soon be voyaging.

FRASER YOUNG'S LITERARY CRYPT NO. 745

A cryptogram is writing in cipher. Every letter is part of a code that remains constant throughout the puzzle. Answer No. 745 will be found in the next issue.

OLD IDEO BUT AGO SE

UKBUTE OLPAGNL.

P. HPAEO.

Answer to Literary Crypt No. 744

The place where optimism most flourishes is the lunatic asylum.

—HAVELOCK ELLIS.

CLASSIFIED

CLASSIFIED ADVERTISEMENTS are accepted for things wanted or unwanted; personal services; literary or publishing offers, unclassified elsewhere; miscellaneous items appealing to a special intelligent clientele; jobs wanted; houses or camps for rent; tutoring; traveling companions; ideas for sale; opinions (limited to 50 lines). All advertisements must be consonant with the character of the Saturday Review. Rates per insertion: 45¢ per word; 10-word minimum. Count 2 extra words for Box and Numbers. Rates for several insertions—52 times 37¢ per word; 26 times 39¢ per word; 13 times 41¢ per word; 6 times 43¢ per word. Full payment must be received seventeen days before publication. We forward all mail received in answer to box numbers and submit postage bills periodically. Mail to be called for at this office will be held 30 days only. Address: Personals Department, The Saturday Review, 25 West 45 Street, New York 36, N. Y.

LITERARY SERVICES

MANUSCRIPTS Typed, ALL FORMS. Theses, Books, Plays. MSS. Delivery all publishers. Editing, ghostwriting, speeches, theses, all subjects. WRITERS' SERVICE, 10 East 43 St., NYC. MUrray Hill 7-5159.

WE SELL YOUR MANUSCRIPT! Literary agents 36 years. Constructive criticism, editing. New writers invited. References. ANITA DIAMANT, The Writers' Workshop, Inc., 280 Madison Ave., NYC 16.

AMBASSADOR OFFICE SERVICE: Professional typing. 17 East 48 St., NYC, PLaza 5-1127.

STORIES, NOVELS, ARTICLES, BOOKS Marketed. Highly recommended for publication of fiction and nonfiction. Editorially recognized advice, recommendations, editing for revision, sales publication. Unestablished writers assisted. Information available before sending manuscript. LAURENCE ROBERTS, LITERARY AGENT, 33 West 42 St., NYC 36.

ELEANOR KING, literary agent, marketing. 19 West 44 St., NYC 36.

TWENTY-THREE IMPORTANT SERVICES for all writers. Free information about membership. NATIONAL WRITERS' CLUB, 1819 Gilpin, Denver 18, Colorado.

OUR book and booklet production-distribution program features author-ownership. 70% royalties. FREE FOLDER. William-Frederick Press, 313 West 35 St., NYC 1.

AUTHORS' SERVICE: Editing, typing, ghostwriting, etc. Literary Aid Bureau, 20 East 100 St., NYC. TRafalgar 6-2294; LExington 2-9380.

BACK NUMBERS

MAGAZINES — Millions of back issues, thousand titles. Try us. "Back Number" Wilkins, Danvers, Massachusetts.

OUT-OF-PRINT

ANY BOOK LOCATED. Free catalogue. MIDWEST BOOK SERVICE, 4301 Kensington, Detroit 24, Mich.

NAME THE BOOK—We'll get it! CHICAGO BOOK MART, Chicago Heights, Ill.

FREE SERVICE, thousands of books, complete assortment fine sets. CRIST BOOK SHOP, 381 Wabasha, St. Paul, Minnesota.

TRAINED BOOK DETECTIVES—We always get your book. Send your "wanted" list to BOOKLAND U.S.A., 31 Wadsworth SW, Grand Rapids, Mich.

JOHN FRIEND, BOOKFINDER, can get the books you want. Free Search Service. Box 2570R, Long Beach 1, California.

YOU NAME IT—WE FIND IT! Prices surprisingly low! Fast service. Try us—no obligation. INTERNATIONAL BOOKFINDERS, Book 3003-S, Beverly Hills, California.

CATALOGUE READY on literature, history, and biography. Vickey Book Service, 9 Brook Street, Stoughton, Mass.

WHY NOT TRY THE BOOKFINDER, Box 140, NYC 5.

THAT BOOK YOU READ years ago and have never seen again. Let us find it for you. Wakefield Press, Earlysville, Virginia.

FOREIGN PERIODICALS

ITALIAN PERIODICALS, Italian Publishers, Times Tower, New York 36.

BOOKS

BRITISH BOOK BARGAINS—ALL SUBJECTS. Catalogue free. Wants solicited. Transbooks, Box 1-S, Wantagh, N.Y.

EXTENSIVE STOCK OF SCHOLARLY BOOKS—literature, etc. Catalogue issued. PYETELL'S BOOKSHOP, 333 Fifth Ave., Pelham, N.Y.

WORLD AFFAIRS. Books and pamphlets on international relations, U. S. foreign policy and allied subjects, not usually available elsewhere, can be found at the World Affairs Center Book Department, 345 East 46 St., NYC 17. Write us or better still pay us a visit.

ISLAMIC ("MOHAMMEDAN") LITERATURE — English-Arabic Koran, Life of Prophet Mohammed. Moslem History. List Sent Free. ABDUL B. NAEEM, Box 36, Brooklyn 21, N.Y.

VIRGINIA BRASIER'S delightful "A Reflective Rib and Other Poems," $1.75. Vroman's, Pasadena, California; or Brown Book Shop, Pasadena.

FRENCH BOOKS

THE FRENCH BOOKSHOP, 556 Madison Avenue. New York's French bookshop where French books are sold exclusively. Mail-order catalogue 40¢.

ART

IMPRESSIONIST REALISM IN PASTEL PORTRAITURE. Gene Sullivan, CIrcle 5-0347 (9 a.m. to 12). Box C-536.

MOONING FOR MATISSE? For Connoisseurs: "Original Prints and Drawings of Modern Masters." Catalogue. 110 illustrations—$1. DEITSCH, 51 East 73 St., NYC 21.

COLOR ART SLIDES from World Museums. Send $1 for three 2 x 2 slides and catalogues. ARTCO, Box 4555, Van Nuys, California.

Friendly little Art School in quaint TAXCO. Individual instruction. Inexpensive living and tuition. Bi-lingual teachers. TAXCO School of Art, Taxco, Guerrero, Mexico.

CONTEMPORARY ORIGINAL PRINTS in limited editions by leading American, European artists offered by non-profit membership organization. Write for application form and free bulletin to INTERNATIONAL GRAPHIC ARTS SOCIETY, 65 West 56 St., NYC.

FREDERIC REMINGTON, signed pen and ink sketches of Koreans. Photograph available. Make offer. Box C-758.

RECORD MART

RARE RECORDS sold, lowly priced. Free lists. Collections bought. E. HIRSCHMANN, P. O. Box 155, Verona, New Jersey.

RECORDERS (ENGLISH FLUTES) KUENG Swiss import, also Dolmetsch, Purcell and Barenreiter. Baroque (English fingering) $3.95, $5, $6.50 up. Recorder music and methods. Free catalogue R107. HARGAIL, 130 West 56 St., NYC.

CLOSEOUT 78's, rare, vocals, cheap. Catalogue. Box C-749.

HI-FI COMPONENTS

FREE—Latest complete stereophonic tape catalogue. Carl Fischer, Inc., Dept. X6, 165 West 57 St., NYC 19.

WRITE FOR FREE HI-FI CATALOGUE of all leading component manufacturers. Carl Fischer, Inc., Dept. SC10, 165 West 57 St., NYC 19.

SCHOOLS

PSYCHODRAMA. New groups forming. 57th Street (NYC). Paul Kalina, WAdsworth 6-9270.

BOOKPLATES

NEW CATALOGUE, including many new designs. Address BOOKPLATES, Yellow Springs, Ohio.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

HOUSES AVAILABLE

For Sale

OLD FARMHOUSE in Sag Harbor, L.I. with waterfront, living room with fireplace, five bedrooms, well-equipped kitchen, bath, partially furnished, year-round living. Three and one half acres, garage and tool house, fruit and shade trees. $20,000. Box 269, Long Island City 1, N. Y.

COLONIAL HOUSE, 4 acres land overlooking fishing pond, 3 bedrooms, 2 baths, 5 fireplaces, sleeping porch, tennis court. One hour Grand Central. Price $35,000. Telephone Darien, Oliver 5-0800.

IDEAL FOR THE RETIRED. Selected but not isolated; modernized Cape Cod, 115 scenic acres. Perfect for tree farming. Small income now but limitless possibilities. $24,000. Fosdick, RFD, 1, Claremont, New Hampshire.

LARGE COLONIAL. 1804, 7 fireplaces, secret staircase, unimproved, 2½ acres, in village. Ethel Gardner, Eastford, Connecticut.

PAWLING VICINITY. Outstanding cut stone (27'x32') two-story studio of famous artist. Skylight, huge stone fireplace, plus charming two-bedroom home. Approximately three acres. Bargain price to settle estate. No reasonalbe offer refused. Agent, Box C-735.

For Rent

LIVE IN "BARN YESTERDAY": Live comfortably modern in the scenic heart of the Litchfield Hills. 2½ hours from New York. 3½ bedrooms, 2 baths, Liv-dining room, kitchen, 2 stone fireplaces, oil furnace, garage, excellent schools. DENNY, Box 20, West Cornwall, Conn., or JUdson 6-7880 (NYC).

PROPERTY FOR SALE

HOMESITE—on private mountain estate. Approximately 9 acres exquisite woodlands for one residence only . . . 2 miles HARMON station . . . 49 minutes Grand Central, N.Y. Hunting, fishing, swimming nearby. Spectacular views. References. $10,000. Box C-733.

BUSINESS OPPORTUNITIES

NORTHWEST CONNECTICUT. Attractive, small Inn-Restaurant. High Quality Clientele. Scenic heart Litchfield Hills. $45,000. Box 20, West Cornwall, Conn., or phone Sawyer, JUdson 6-7880 (NYC).

PERSONALS

WIN MONEY on network TV quiz show. If you're an extrovert and have decent fund of knowledge—call TEmpleton 2-8600 (NYC).

THOSE FABULOUS FABRICS STILL! "Avoca" handwoven Irish tweeds. Imported tartans. Bleeding Madras; winter cottons from India, Mexico. Carol Brown, Putney 14, Vermont. And "heirloom" blankets.

MALE SOCIAL WORKER-EDUCATOR with twenty years experience settlement, camping and adult education desirous of making change to private camping or business world. Preferably New York City metropolitan area. Please write fully describing opportunity and maximum salary. Available after January 1, 1958. Box C-541.

"HOW CAN I FIND OUT?" You can! Information confidentially developed. Any matter, person, problem. Worldwide. Officially licensed. Established 1922. WILLIAM HERMAN, 170 Broadway, NYC.

PERSONABLE CAREER WOMAN, employed but handicapped, offers rent-free private room in exchange for companionship weekends and some evenings. Full apartment privileges; modern elevator building. Telephone Polshek, PLaza 1-2100 (NYC), 9-5 or WAtkins 9-5600 evenings.

ANTIQUE POSTERS—CIRCUS, DRAMA, GAY NINETIES. Spanish Toros, French Riviera, etc. Lists for stamp. Central Show Printing Co., Box S-617, Mason City, Iowa.

MILDLY INTELLECTUAL BACHELOR, energetic, fifty, traveling Europe 1958, seeks companion, share expenses. Box C-744.

TOP CASH PAID for letters and documents of famous people. Ask for free brochure. "How to Sell Your Autographs." Charles R. Hamilton Autographs, Inc., 515 Madison Ave., NYC 22. ELdorado 5-3664.

UNUSUAL OPPORTUNITY for enterprising man or woman with cultural and business background. Retiring President offers majority stock in leading national service organization. Box C-741.

DIGNIFIED HAND MADE CHRISTMAS CARDS, 25¢ each. 10 limit. Box C-531.

PERSONALS

DOG CHRISTMAS CARDS, hand colored. 25¢ brings sample. State breed. Betsey Brownell, 192 Bowen St., Providence, Rhode Island.

COMPANION (35-45) female, non-smoking, for artist wife of scientist. Drive car, nature lover, apartment connected to main house. Pine forest near western college town and Indian reservation. Box C-718.

JUST OFF THE PRESS—YOURS FREE! A catalogue of unusual, hard-to-find Gifts and Fashions. Selective conversation pieces. Write: HERE'S HOW SHOP, 95 Fifth Ave., NYC 3.

YOUNG MAN, 27, MM, seeks position in music field. Box C-748.

HARPSICHORDS, CLAVICHORDS, VIRGINALS for the discerning musician; from $380. Write for free Catalogue HVC, John Paul Company, 39 Grove Road, Eastbourne, England.

FOR RENT: ROOM, cross ventilation, river view (NYC). $65 month. Box C-752.

YOU CAN MAKE MONEY at home in spare time taking magazine renewal subscriptions. No capital or experience necessary. All supplies furnished. Write today! McGregor Magazine Agency, Dept. 240, Mount Morris, Illinois.

RETIRED COLLEGE PROFESSOR teaches German and French, also translations and research. Dr. Philippine Hannak, 514 West 114 St., NYC, Apartment 44. Phone MOnument 2-8514.

CHARMING, EXCLUSIVE MADISON SQUARE PARK—Attractive 1 room studio suites with full hotel service. MADISON SQUARE HOTEL, 35 Madison Ave., NYC. Transients from $3.50. Attractive weekly, monthly rates. LExington 2-6880.

HAVE TYPEWRITER—WILL TRAVEL. Thoroughly experienced advertising-publicity-editorial gal, creative writer, seeks challenging position U.S. or abroad. Box C-756.

HERALDIC WALL PLAQUES—Full, Family Coat-of-Arms authentically reproduced in full color to special order, mounted on oak base. Thousands of names (American and European) on file. 6" x 7"—$13.50. 10" x 12"—$19.95 postpaid. HERALDIC PUBLISHING CO., 104 East 40 St., NYC 16, Suite 902.

WANTED—Adams Titian ware pottery, Della Robbia in ivory, blue band. Any pieces. Box C-743.

REPAIRERS OF THE IRREPARABLE. Restoring China, Glass, Silver, Art Objects, Ivory, Tortoise Shell, etc. Lamps mounted. HESS REPAIRS, 168 East 33 St., NYC 16. MUrray Hill 5-4280.

STENOGRAPHER-TYPIST desires evening work. SAcramento 2-2675 (NYC) evenings.

Learn "BY EAR" with Dormiphone. While you slumber, amazing new scientific invention works for you. Revolutionary Dormiphonic tools give you a short-cut to learning languages, correct speech; memorizing facts, figures; ideal for self-improvement, relaxation, habit training. Saves time, effort. So simple, children benefit. Used by educators, psychologists. Write today for fascinating FREE Book. No obligation. Modernophone, Inc., 322-107 Mezz., Radio City, New York 20.

YOUNG WOMAN, 34, trained in elementary education, occupational therapy, with library experience, wishes position on country estate (preferably New England) where two school-aged daughters, 2 spaniels could be accommodated.

CATS FOR ADOPTION. All sizes, all colors. Free. WAtkins 4-8493 (NYC).

OLD LETTERS WANTED. Authors, statesmen, scientists, military leaders, musicians, etc. Correspondences or single items bought and sold. Established 1887. Catalogue on request. Walter R. Benjamin Autographs, 18 East 77 St., NYC 21. REgent 4-3902.

LEARN WHILE ASLEEP! Details free. Research Association. Box 610-N, Omaha.

WELL-EDUCATED, mature woman seeks position: Receptionist (typing), Companion, Housekeeper. Box C-710.

BRITISH SHOES FOR GENTLEMEN for a fraction of their American retail price! $10.95 includes duty and import charges. Delivery in ten days from receipt of order. Unconditional money-back guarantee. Write for free illustrated catalogue. Steven Williams, Sr., Ltd., 40 Chatham Road, Short Hills, New Jersey.

EXCHANGE SMALL ROOM and kitchen privileges for baby-sitting 3-6 p.m. three weekdays plus one or two evenings. Vicinity Central Park West, 96 Street (NYC). All transportation. Prefer student. RIverside 9-4528 after 6 p.m.

PERSONALS

FRENCH, ITALIAN—SPEAK FLUENTLY. Efficient, interesting method. LExington 2-9983 (NYC).

NOT STEREOTYPED! Male librarian offers enthusiasm, experience, in exchange for right position. Box C-746.

FAMILY ARMS — English, Scotch, Irish, European. Write M'Wethy, St. Johnsville, N. Y.

WRITER-EDITOR wants writing-editing job. Advertising, publicity, house-organ, magazine experience. Minimum salary, $7,500. Box C-750.

FREE LANCE COPYWRITER WANTED. Advertising editorial style. Send samples. Box C-754.

TRAVEL

CARIBBEAN TRAVEL SERVICE—Hotel and air itineraries to fit any budget. Specialists on local information. Write airmail for details on an island vacation. V.E.B. Nicholson & Sons, Box 103, Antigua, B.W.I.

WORLD STUDENT TOUR to Greece, Egypt, India (options to Japan or Southeast Asia). Departure June 21, July 5. (Limited membership.) Rate $1,995, includes Around-the-World air ticket. Applications until January 30. Write CORONET TOURS, 530 West 6 St., Los Angeles, California.

CARIBBEAN YACHTING CRUISES—Join a congenial group (or form your own) for a voyage between Antigua and Grenada. Gracious living, a different harbour every night, swimming and fishing in coral lagoons. From $173 weekly. Write airmail V.E.B. Nicholson & Sons, Box 103, Antigua, B.W.I.

EUROPE 1958. ECONOMY CIRCLE TOURS; folders now available. 35, 44, 60 days in Europe visiting 12, 13, 18 countries with Britain, Scandinavia, Italy, $975-$1,195 with steamship passage. All meals, excellent hotels, luxury motorcoaches, theater, concerts, opera. No extra expenses. Tours expertly conducted. MIDWEST Tours, Reidar Dittmann, Northfield, Minnesota.

VACATIONS

Enjoy a complete escape from the usual. TEPOZTLAN, a primitive Aztec village, unspoiled by tourism, is off the beaten track. A climate incomparable, luxurious accommodations, good wholesome food, American management, reasonable rates. A place to rest and relax. 20 minutes from Cuernavaca, 2 hours from Taxco, 4 hours from Acapulco, and only 1½ hours from Mexico City. A postcard will bring you our brochure. POSADA DEL TEPOZTECO, Tepoztlan, Morelos, Mexico.

WINHALL MOUNTAIN LODGE—Now the leaves are turning—Enjoy superb food, the autumn scene. Folder. Manchester, Vermont.

INTERESTING PLACE FOR INTERESTED PEOPLE. Good all year climate, beautiful mountain views, excellent food, private baths. Number limited. Monthly or weekly rates. We like Metaphysics, Books, Music, Nature and Rocquefort Cheese. Bridge players or creative workers appreciated. Cherry Lane Farm Fletcher, Nor Carolina.

PELICAN COVE—in unspoiled Florida Keys. Immaculate oceanside apartments, beach, fishing, shelling, skindiving, birdwatching, loafing. Literate, congenial company on balmy tropical isle. Tom and Carolyn Brown, Islamorada, Florida.

GREEN SHADOWS INN, Old Lyme, Conn. Open all year.

CARMEL, CALIFORNIA. Are you one of the few who enjoy peace and quiet, beautiful scenery and appointments, literate company? PETER PAN LODGE has this plus unsurpassed food.

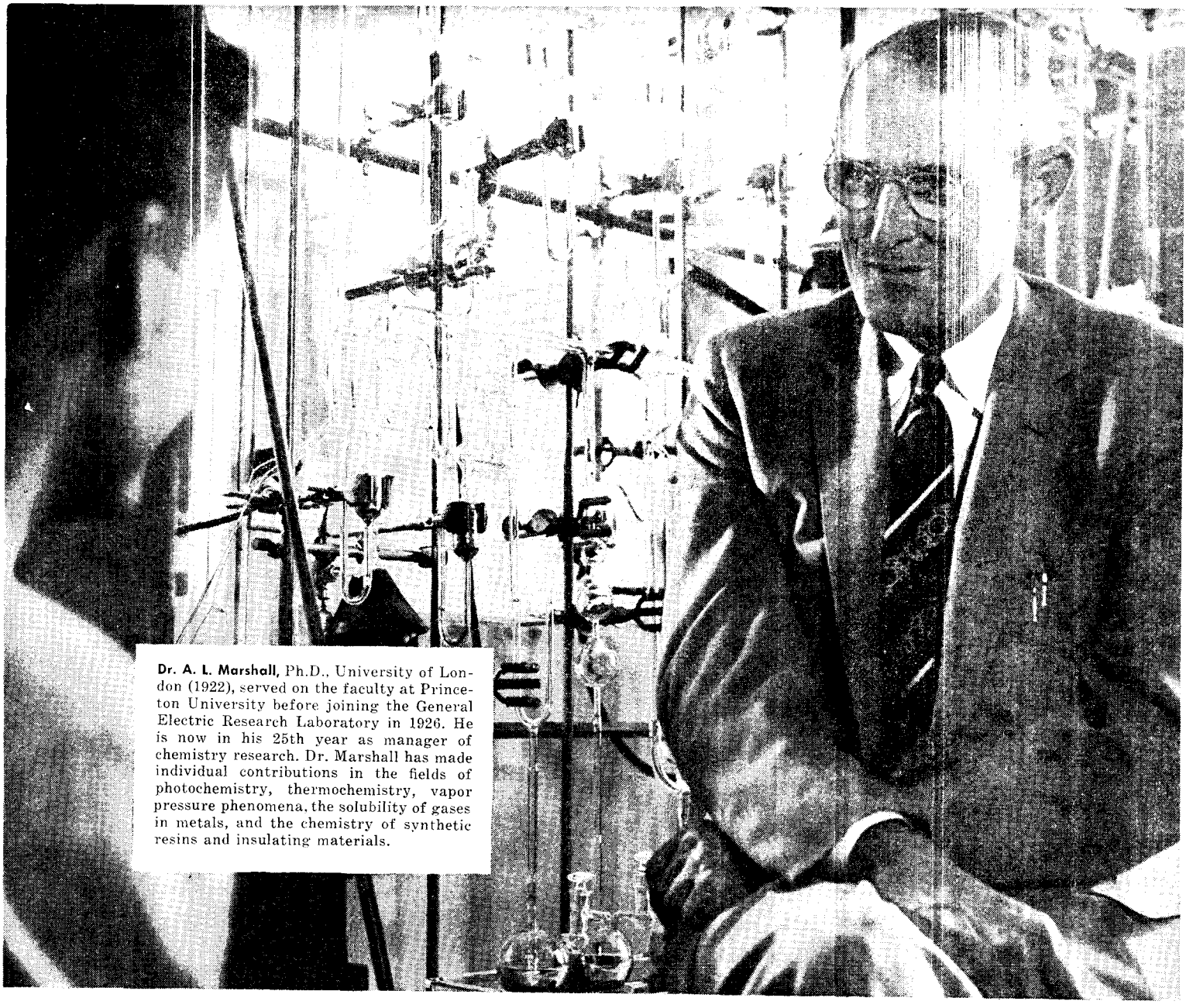
KANDAHAR LODGE, MANCHESTER, VERMONT. Plan now for the beautiful Fall season. The finest vacation time at Kandahar. Blazing foliage. Congenial, interesting companions. Restful, informal. Sports. Excellent food and accommodations. Automatic head. Folder.

LIKE THE COUNTRY IN THE AUTUMN? Come to Graymont, a colonial home. Write for brochure—R.D. 2, Middlebury, Vermont.

AUTUMN AT BLUEBERRY HILL! Flaming maples. Lucullan food. Nothing whatever to do. The Mastertons, Brandon, Vermont.

TUILAUVENT, Maple Road, Brewster, N. Y. 9-8106. Friendly, informal home atmosphere. No planned activities. Relaxation, reading, painting, in beautiful countryside 50 miles from N.Y. Ideal for weekends and vacations. Open all year. Attractive, sunny rooms. French cooking. Moderate rates.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Dr. A. L. Marshall, Ph.D., University of London (1922), served on the faculty at Princeton University before joining the General Electric Research Laboratory in 1926. He is now in his 25th year as manager of chemistry research. Dr. Marshall has made individual contributions in the fields of photochemistry, thermochemistry, vapor pressure phenomena, the solubility of gases in metals, and the chemistry of synthetic resins and insulating materials.

Chemistry in the electrical industry

The work of Dr. A. L. Marshall shows why research in chemistry is vital to General Electric

The problems of *electrical insulation* prompted the electrical industry's earliest interest in chemistry. Dr. A. L. Marshall was among the first to realize that getting better electrical insulation would depend heavily on getting fundamental facts about polymers, and under his leadership the primary goal of chemists at the General Electric Research Laboratory has been a *"new understanding* of basic structures and basic reaction mechanisms."

New knowledge has led inevitably to new products: silicones, improved wire enamels, irradiated polyethylene, and many others. It has helped produce materials with potential for *structural use* as well as insulation. Dr. Marshall predicts that within a decade the electrical industry may have as much need for plastics as for steel.

He also has directed his philosophy of basic research toward other areas. In *superpressure, friction studies,* and *combustion,* for example, the eventual results from new scientific knowledge can be seen in such things as man-made diamonds, better bearings, and jet engine combustors.

Dr. Marshall's leadership in fundamental research is another reason why scientists at General Electric are uncovering new knowledge that can contribute to better living standards for people today and for generations to come.

Progress Is Our Most Important Product

GENERAL ELECTRIC

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

—Camera Press—Pix.

SR/Research

SCIENCE & HUMANITY

DEPARTMENTS: Research in America • Personality Portrait—XIX • The Research Frontier • Science in Books • Letters to the Science Editor

ARTICLES: The Poetry of Science

RESEARCH IN AMERICA

PRINCE PHILIP, SCIENCE AMBASSADOR FOR THE QUEEN

UNDER the White House roof in this month of October 1957 will abide for a few brief days an opportunity seldom matched in the history of scientific man. It will dwell in the presence of His Royal Highness Prince Philip, husband of Elizabeth II, the young English Queen whose subjects people a quarter of the surface of the Earth.

In the home islands of the Prince and his sovereign spouse, scientists practice fundamental research as naturally as Londoners breathe the fog. Basic science has the same timeless quality that hangs in the flowing robes of British university tradition, turns in the satisfying circles that roll cycling dons to class. There is leisure in it for the patient scrutiny of nature as the host of man, and tolerance for the examining of man as a chrysalis tangled in his own-woven cultural cocoon. Out of its somnolent atmosphere flash on occasion insights which light the imaginations of men for generations after. Jeans's postulation of hydrogen fusion in the stars was such a brilliance; another was Rutherford's original transmutation of atoms.

"Great advances depend on the accident of individual genius and are not at our command." That is the essence of it, as Philip himself has expressed it. At a different time, he has posed the corollary question for research in the British Isles: "What is hampering the practical application of new discoveries?"

If science in the United States had a spokesman of the Prince's political stature (the White House seems almost aggressively disinterested in the prospect) he would define the American problem simply by turning the British problem upside down. In this country, near-miracles of applied science happen practically every day. Bigger and better inventions apparently are natural to the inhabitants of a vast, open continent. Time presses, and only a few researchers look upon the distant hazy fringe of knowledge as an appropriate horizon for discovery of the immediate wants of a dynamic modern society.

The opportunity that will momentarily reside in the White House in mid-October, then, will be the chance to devise a continuous fruitful exchange of American scientific technology for British scientific theory. It could not be a simple swap, simply arranged. Patent entanglements would have to be anticipated and resolved. The usual obstacles of nationalism would have to be surmounted. But are those difficulties less palatable to contemplate than alternate prospects roused by the spectacular theoretical and practical advances made by the chess-playing wizards of Eastern science in the forty years since Russia's October revolution?

So far as we know, the agenda for the British royal visit to President and Mrs. Eisenhower contains no item for discussion of this sort. Only a few far-sighted men in Washington think that it should. Whether or not the President has even heard of the notion is beyond our ken. Only one point is clear in our mind: Prince Philip would be ideally qualified to initiate such negotiations. He is, beyond cavil, *the* Science Ambassador for the Queen.

It is plain from public chronicles of his comings and goings that Philip's interest in science pleases Queen Elizabeth. How do British scientists feel about it? We asked Dr. D. C. Martin, assistant secretary of The Royal Society in London, and this is his reply:

"This country could have no finer ambassador to the scientists of the world."

How genuine is the princely concern with science, how much a concession to protocol?

Dr. Martin is better placed than most men to distinguish between the ceremonial obligations of the Crown and Philip's personal enthusiasm. Here is his judgment on the matter:

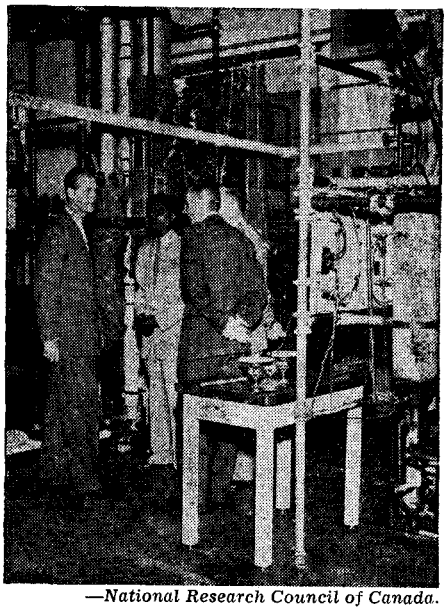
"The duties which Prince Philip undertakes of ceremonial character, indicating the relative position of science as part of the national life, . . . should be strictly proportional to the popular interest in science. These protocol requirements would be easily satisfied by a great deal less than Prince Philip undertakes in the field of science."

"When he was elected president of the British Association for the Advancement of Science, he very clearly showed that this was not going to be just another public appearance," Dr. Martin recalled. That was in 1951, while Elizabeth was yet a Princess and Philip was merely son-in-law to the King. At the time, the young Duke of Edinburgh was serving as a naval officer on HMS *Magpie*. Thinking him much too occupied to prepare an inaugural address, royal advisors plied him with what they considered helpful notes. Philip surprised them by writing the entire speech himself and reviewing in it a century of scientific progress, accurately characterizing the record as "largely the story of the fulfilment of . . . hopes" of his great-great-grandfather, Al-

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

—*Camera Press—Pix.*

Prince Philip studies hydraulics . . .



—*National Research Council of Canada.*

. . . looks into Canadian chemistry . . .

bert, the extraordinary science popularizer who was Prince Consort to Queen Victoria.

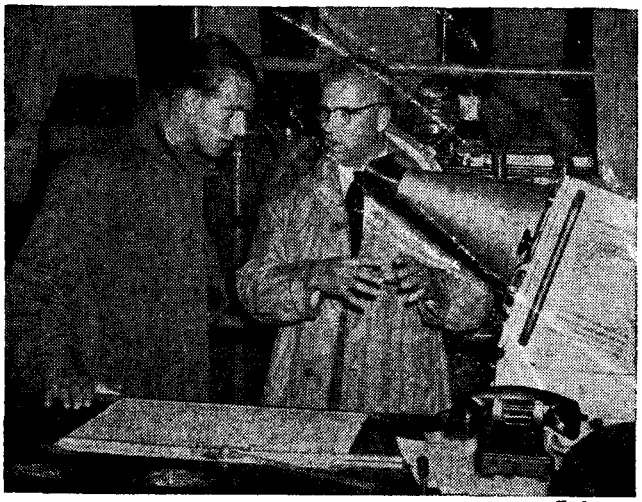
Against the opposition of powerful critics, Albert had organized the International Exposition of 1851, bringing under the eyes of British scientists the newest achievements of science outside the islands. Empirical industrial development then had outstripped scientific theory in England. But the shock of the Exposition's revelations stimulated research and set off a technological explosion that reverberated for decades.

"Those of us who heard . . . were astonished at the masterly way" Philip paraded great names and events across the receding arc of time. Eddington and Jeans in astronomy . . . Abercromby and Shaw in the troposphere . . . Appleton in the ionosphere . . . Thomson and the electron . . . Rutherford and the atomic nucleus . . . Sorby in metallurgical microscopy . . . Parsons and the steam turbine . . . Dunlop and his auto tire . . Lanchester's vortex theory of flight . . . Whittle's work on jet propulsion . . . Faraday in electricity . . Maxwell and magnetism . . . Perkins in dye chemistry . . . Bayliss, Starling, Banting, Best, Fleming, Simpson and Lister in medicine . . and, of course, Charles Darwin.

"The instrument of scientific knowledge in our hands is growing more powerful every day," Philip concluded. "Indeed, it has reached the point when we can either set the world free from drudgery, fear, hunger and pestilence or obliterate life itself. . . . The people who control the scientific machine, both laymen and scientists, should have a proper understanding and appreciation of what science has grown into and its place among the great forces of the world. . . . It is clearly our duty as citizens to see that science is used for the benefit of mankind. For of what use is science if man does not survive?"

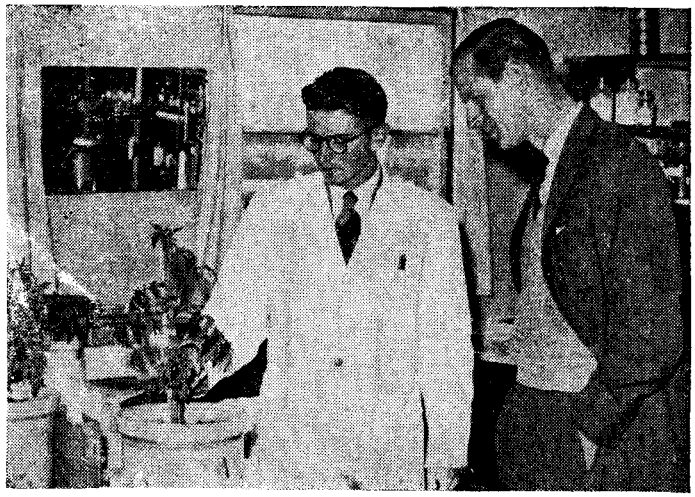
"From that moment," Dr. Martin notes, science was convinced "that the Prince's interest in science was a deep one" and "his actions since have proved this to be true." Certainly no other subject of the Queen has traveled so far and probed so persistently for "a proper understanding and appreciation of what science has grown into" throughout the Commonwealth and Empire. Philip has peered at leprosy bacilli under the microscope in Africa (see the photograph at the SR/Research masthead), studied experimental crops at irrigation research stations in New Zealand, visited stone age villages in New Guinea, flown to science outposts in Australia's "outback," gone down the shafts of Canada's Arctic uranium mines, crossed the Antarctic Circle in water adrift with icebergs and had himself slung from the yacht *Britannia's* masthead in a basket onto a whalecatcher that was using a fifty-foot sperm whale as a fender, and brought down on his head accusations of irresponsibility by getting onto the ice itself and trying to catch a penguin.

Wherever he goes on these travels Philip always equates science and humanity. In reporting on the Arctic, for example, he first gave credit to science for having made life in frigid territories "not only tolerable but almost as comfortable as in the more temperate zones"; in the very next sentence he said, "I feel I must add a special tribute to the wives whose cheerfulness and courage does more than anything to make life pleasant in remote settlements." This is not mere talk. The Prince thinks independently about what he observes. From the charts and data of British explorers he conferred with in the



—*Fednews.*

. . . rides a floating radar lab . . .



—*European.*

. . . sees crop science in New Zealand . . .

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Antarctic, for instance, he inferred "the possibility that the Antarctic continent might be used as a gigantic germ-free cold store where the periodic world food surpluses might be stored against lean years and famine."

In the home islands, he is personally acquainted with practically all the research establishments of the government. Some of them he has visited repeatedly. His calls are never superficial. He wants to know how things work, and if they couldn't be done better. At the beginning of last July, he spent an hour and a half on TV explaining the International Geophysical Year to millions of his wife's subjects. Our cover shows him (with whalebones) broadcasting science to children. One item on his calendar at the time these words are written is intended to further his education on cosmic rays. He is already up to the minute on radioactive isotopes, transistors, and plastics as a construction material for future airplanes. What he doesn't see on his travels he fills in by poring over scientific textbooks late at night.

Buckingham Palace and Windsor Castle are filled with small evidences of his technological bent. Instead of wasting time with pages, he sends messages down the long corridors on an inter-com. A radio-telephone hookup links the Palace and the Castle with all the royal limousines that are on the roads within thirty miles of either. To speed his personal correspondence, he uses an electric typewriter and a tape recorder. To keep himself, the royal family and its retainers comfortable he has modernized Buckingham's central heating, and introduced electric washing machines, bread slicers, complicated can openers, pressure cookers and time switches for automatic cooking. One domestic problem he hasn't solved, as he told a lecturer at the National Physical Laboratory, is "what makes my bath water gurgle when I pull the stopper out?"

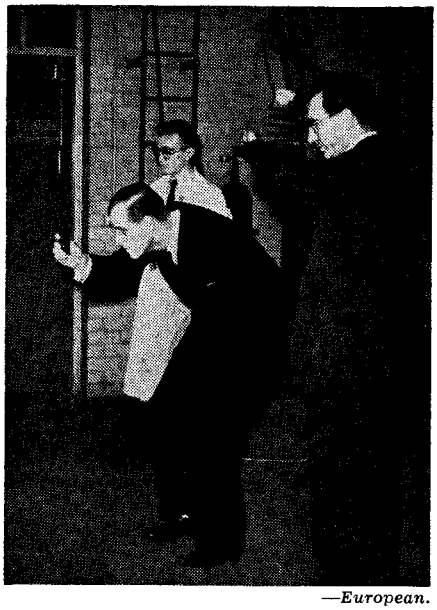
Exactly one hundred years ago there was published in England a bound volume of the speeches of Philip's great-great-grandfather, Prince Albert. It was a scientific document. Later this fall, Oxford University Press will bring out a book of Philip's own addresses (Oxford's two-volume report on His Royal Highness the Duke of Edinburgh's 1956 Study Conference on the Human Problems of Industrial Communities within the Commonwealth and Empire is required reading for anyone who wants to be truly informed on the impact of science on society, primitive and modern) that leads us to guess that Philip will surpass his famous forebear as a middleman between the scientist and the culture to which he belongs. Here is one of the passages that prompts us to think so: "The conflict is not between disciplines, between humanism and science. The conflict lies between man and the world he has made for himself. . . ."

• • •

PRINCE PHILIP'S visit to the United States may turn out to be a valuable illustration for a symposium conducted last month by the American Political Science Association. In that meeting were brought together students of science in relation to government. No findings were published, but the consensus was that President Eisenhower should have a science advisor on his immediate staff in the White House. It was agreed that this man probably should be the chairman of a three-man commission, and that the commission should be paralleled in Congress by a joint science committee of the Senate and House. (For back-

—*Atomic Energy of Canada, Ltd.*

. . . peers into an A-furnace top.

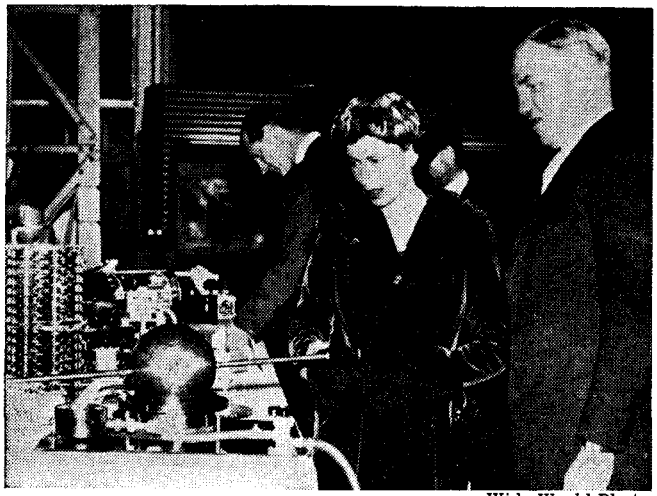


—*European.*

. . . watches British steel melt . . .

—*Wide World Photo.*

. . . feeds penguins in the Antarctic . . .



—*Wide World Photo.*

. . . probes atomics at Harwell with the Queen . . .

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ground see SR/Research for February 1957.)

• • •

AN INSTANCE of the White House need occurred a few weeks ago with the appearance of a petition signed by 400 prominent scholars from thirteen non-Communist nations. The petitioners were delegates to the fifth international conference on low temperature physics and chemistry at the University of Wisconsin. The object of their plea was to stop wastage of helium gas.

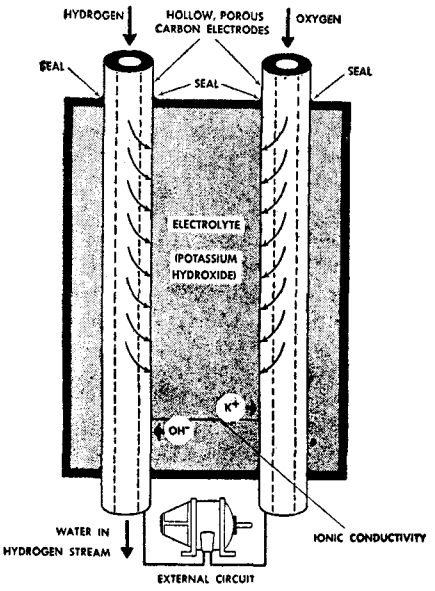
The United States is the only country outside the Iron Curtain where any sizable quantities of helium-bearing natural gas have been found and the petitioners warned, "there is real danger that our supply from this cheap source will be exhausted in a decade or two." The danger is one of omission. Helium is simply not removed from the millions of gallons of natural gas which flow through the pipelines.

Helium in its liquid form is the only available means of pulling the thermometer down close to absolute zero. At that depth, superconductivity occurs—a mysterious state in which certain metals (ordinarily poor conductors of electricity) lose all their resistance to the flow of electric current. Example: A 100 ampere burst of power has circled inside a ring of lead for more than a year without losing any of its strength. If such performance could be matched at ordinary room temperature, generation and transmission of all forms of electric power—the heartbeat of modern civilization—might be revolutionized.

SCIENTISTS HAVE KNOWN for a long time how to draw electricity directly from the two most familiar gases of the air—hydrogen and oxygen. It is a trick that has been repeated in the laboratory over and over again. But until last month it was never more than a curiosity.

Last month the National Carbon Company Division of Union Carbide Corporation announced that scientists in its new research laboratory at Parma, Ohio, had turned the old trick into a practicality. By treating hollow tubes of porous carbon with a secret chemical formula, they had freed chemical energy from hydrogen and oxygen while the gases were passing through the hollow tubes. This carbon fuel cell has a theoretically unlimited life, capable of generating thousands of watts.

The accompanying sketch shows how the cells work. Curved arrows indicate gas seeping through porous carbon to reach potassium hydroxide previously sealed into the battery jar. The hydrogen and the hydroxide form water and free electrons. Potassium is also liberated in this exchange, and the incoming oxygen combines with it to form more hydroxide. The freed electrons move out of the cell through the hydrogen-carrying carbon electrode and go back in through the oxygen-carrying electrode. Since electricity is nothing but moving electrons, there is a continuous current as long as new hydrogen and oxygen are introduced into the jar.



Power generation by the fuel cell is twice as efficient as conventional burning of hydrogen and oxygen to make steam to spin turbines. The cell's one big disadvantage is that hydrogen is very expensive. There may be cheaper sources of it in sunlight and the atom. The energy in sunlight can be captured now by solar furnaces but it cannot be stored; perhaps it could be used to decompose water into hydrogen and oxygen for later use in fuel cells. Atomic energy is also known to decompose water. In present-day A-furnaces, this decomposition must be avoided. Perhaps in future it will work the other way, with A-energy directly producing hydrogen and oxygen for fuel cells.

• • •

IN ELUCIDATING his theory of evolution, Charles Darwin argued that primitive man must have been "only . . . a little more perfect than other inhabitants" of whatever patch of earth he first occupied. If the original human superiority over contemporary animals had been more than relative, he contended, the principle of natural selectivity among the species would have ceased to operate. On this point he differed sharply from his co-proclaimant of the survival-of-the-fittest doctrine, Alfred Russell Wallace, who had lived among aborigines. The primitive tribes Wallace knew were, he insisted, mentally able far beyond their immediate needs; they had artistic and musical talents which he could associate only with a spiritual quality; besides, they shared more advanced mankind's "peculiar larval nakedness"; hence man must have developed faster than the other animals . . . probably, Wallace thought, by some divine direction.

Last month two Southern Illinois University scientists proposed a tentative explanation of how the jump that Wallace's mind could not hurdle might have come about through a kind of natural selectivity. In a report they read to the American Institute of Biological Sciences at Stanford, Calif., Dr. Karl C. Lindegren and David D. Pittman described experiments in which they bombarded yeast cells with X-rays. Before the bombardment, only a very small proportion of the cells could digest certain sugars they were offered as food. After the bombardment, about one in every 100 million surviving cells could digest the sugars and they passed this new digestive ability on to their descendants.

Since X-rays are a part of the constant radiation from the sun, it theoretically would have been possible for sunlight alone—acting on earlier forms of life in the primeval oceans—to have evolved higher orders of life in a much shorter span of time than previously believed.

• • •

A ROUGH approximation of a time-table for the launching of the first American-made moon has just emerged from an IGY symposium staged by the Hayden Planetarium of the American Museum of Natural Science in Manhattan. Speakers gave late September or early October as the probable date for the third of eight satellite vehicle test flights. Since only the last four of these eight vehicles are to carry the six-inch pre-moon that has recently been added to the IGY show, it will be late autumn before there is even an accidental possibility of actually seeing a satellite in the sky.

"We aren't trying to put it into an

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

orbit," one official moon-launcher insisted in response to our questionings about the six-incher. "We're using it only to give us a record of the performance of the vehicle. Of course, if it does enter an orbit and stays up there for a while, that will be okay with us. We'll learn more than we expect."

The full-scale, twenty-inch satellite won't be ready until spring of 1958 at the earliest.

• • •

THE American Association for the Advancement of Science has just published, in the journal *Science*, a description of the two-faced individual American high-school pupils see when they hear the word "scientist." The image is drawn from essays which boys and girls of more than 100 schools were persuaded to write on a confidential basis. The essays were read and analyzed by Dr. Margaret Mead, Associate Curator of Anthropology at the American Museum of Natural History, and Dr. Rhoda Metraux, research fellow at Cornell Medical College in New York. The following summary of their analysis illustrates once again a favorite thesis of SR/Research: that the scientist must strive to demonstrate his social awareness beyond possibility of mistake.

"In general, while an official image of the scientist—that is an image that is the correct answer to give when the student is asked to speak without personal career involvement—has been built up which is very positive, this is not so when the student's personal choices are involved. Science in general is represented as a good thing; without science we would still be living in caves; science is responsible for progress, is necessary for the defense of the country, is responsible for preserving more lives and for improving the health and comfort of the population. However, when the question becomes one of personal contact with science, as a career choice or involving the choice of a husband, the image is overwhelmingly negative."

Can this ambivalence be remedied?

Drs. Mead and Metraux offer these suggestions:

1. To newspaper and magazine writers—write about scientists as though they were human beings.

2. To school teachers—begin teaching science in the kindergarten, related to living things and their wondrous nature; introduce mathematics as early as possible; encourage participation of pupils in classwork, particularly in team projects; include the girls as raw material, not only for their own potential as researchers but for their influence on boys; play down the role of the genius, emphasize the role of the less brilliant contributors who make up the great bulk of science; talk less about science and the scientific method, more about scientific disciplines in their individual functions—biology, physics, chemistry, psychology—to equate them with law, medicine, music, theater, art.

The weakness of these proposals is the weakness to which all of us who try to translate science are accustomed. That is, the scientist himself. Writers cannot present scientists as human beings without the scientists' own co-operation. For a sample of reaction to one suggestion for humanization, turn to page 50.

• • •

ONE of the trials of Hercules, the Greek mythological hero, was an encounter with the Hydra, a creature of nine heads. Every time Hercules cut off one head, two heads grew in its place. This was just about the worst dilemma the ancient Greeks could think up. But that was because they had never heard of the real hydra, which is a mere quarter-inch long and is possessed of only five thin tentacles—yet has on each tentacle thousands of paralyzing stinger cells which detach themselves from the hydra, cling to and kill larger prey, and are quickly replaced by new stingers.

The 132nd national meeting of the American Chemical Society in New York City last month heard about the real hydra from Edward S. Kline and Howard M. Lenhoff, of the Armed Forces Institute of Pathology, Walter Reed Medical Center, Washington, D. C. Pursuing a suggestion made earlier by Dr. William F. Loomis, a Greenwich, Conn., biochemist, the two Army scientists found that the stinger cells (called nematocysts) manufacture hydroxyproline, a chemical which forms protein. In humans, hydroxyproline is believed to exist only in one protein: collagen. Collagen forms ligaments, tendons and connective tissues which are involved in arthritis and related diseases.

"As far as we know, the hydra is the only animal that can be grown in the laboratory which naturally produces large amounts of hydroxyproline-containing protein constantly," the report to the chemists said. "Since collagen of higher animals is thought to be formed outside of the cell, it is difficult to study how the cell would control this process. But in the case of the hydra the collagen is formed inside the cell and thus should be easier to study."

Any fundamental discovery about how nature makes collagen will be welcomed by medical science. Few other human afflictions cripple as mercilessly as rheumatoid arthritis. Thousands of victims of this joint-stiffening ailment are pinned helpless in chairs and beds. Millions more are hobbled to lesser degrees—4,700,000 in the United States alone.

The riddle of this ancient and discouraging sickness, for which no cure has yet been advanced, is if anything more profound since the 1957 International Congress on Rheumatic Diseases in Toronto. Fourteen hundred researchers who attended that meeting from forty-odd nations learned of a new drug that has stopped the disease in as many as seven of every ten patients. But the drug's method of working cannot yet be fathomed because it seems to attack the underlying cause long before it affects the symptoms. Pain is not relieved with any great speed, nor are swollen joints reduced quickly. Nevertheless, the whole rheumatic process appears to be halted throughout the body. The drug is chloroquine.

• • •

THE best guess at the age of Earth's crust is 4.5 billion years. The crust formed after the planet spent somewhere between 50 thousand and 500 million years cooling off. Some time after that—probably 300 million years back—both the Earth and the Moon were showered with the wreckage of two other planets which collided. Craters dug by the raining chunks of debris very likely gave the Earth the same bleak appearance then that the Moon now presents to us. But the weathering of the ages filled in most of the chasms and eroded others, leaving only a few miles-wide pits around Hudson's Bay in Canada and the southwestern United States to hint the cataclysm. The Moon, having no atmosphere, had none of this softening weather and so remains much as it did at the time the craters were gouged in its face.

The foregoing is the consensus of geophysicists gathered in Toronto for the General Assembly of the International Union of Geodesy and Geophysics. The experts agreed that the Earth and the other planets of the solar system were formed at the same time. They put off to a future meeting the question of how it all came about.

—JOHN LEAR,
Science Editor.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Are Statistics Trite?
On the Contrary, They're

THE POETRY OF SCIENCE

By F. EMERSON ANDREWS

POETRY is the only form in which some of our oldest stories and ideas have come down through the ages. In many periods it has been the vehicle for man's most advanced thinking. It has sometimes described events and even concrete objects more memorably and accurately than any prose. In setting moods and stimulating imagination its power cannot be approached. Poets have been the first to express most of our deepest philosophic thoughts; and poetry has many times been amazingly prophetic.

Let us cite one trite but remarkable example. Before 1842, considerably more than a century ago and more than sixty years before the Wright brothers upset scientific thinking by proving that heavier-than-air flying machines were possible, Alfred Lord Tennyson wrote these lines in "Locksley Hall":

For I dipt into the future, far as
human eye could see,
Saw the Vision of the world, and
all the wonder that would be;

Saw the heavens fill with commerce, argosies of magic sails,
Pilots of the purple twilight,
dropping down with costly
bales;

Heard the heavens fill with shouting, and there rain'd a
ghastly dew
From the nations' airy navies
grappling in the central blue;

Far along the world-wide whisper of the south-wind
rushing warm,
With the standards of the peoples plunging thro' the thunderstorm;

Till the war-drum throbb'd no
longer, and the battle-flags
were furl'd
In the Parliament of man, the
Federation of the world.

Poetry reached these achievements against what must seem insuperable odds. Consider. Traditional poetry had to preserve intricate metrical patterns. Worse still, much of it was rhymed, so that in some types of verse not only were all words constricted to the rhythm pattern, but every fifth or sixth word had to be paired in sound with a companion word.

Poets are not, I think, a different race of men with minds so incomparably fine that they can think more effectively and see farther ahead than the rest of us. They have minds no better than ours, and sometimes worse. If they often reach more effective ideas and expressions, it is not in spite of the handicaps of meter and rhyme; it is because of those handicaps.

The mind works on two levels, the conscious and the subconscious. We can set it to work, as in adding a grocery bill. Consciously adding, it is often correct; sometimes it is wrong. But when addition becomes automatic, proceeding without thought of the individual numbers, the answer is always right. The subconscious mind, we are told, is a flawless mechanism that works even when we sleep. Out of that wide universe of knowledge and experience that have by any means found entrance to it, this machine brings up toward and sometimes through the threshold of consciousness answers that correctly combine all the data it has assembled.

The poet wishes to say something. The trite, common, unconsidered word that first flashes into his conscious mind does not fit the meter. In prose, that word would be used; in poetry, it must be rejected. The poet tries to find a better metrical fit. He turns the whole idea around and around, looks at all sides of it, considers alternatives. He tries out variations, even perhaps the negative of the original idea.

Meanwhile, his subconscious mind is also at work. Suddenly a wholly new idea flashes from the subconscious into consciousness. We call this inspiration; it came to the poet and not to the writer of prose because the poet was forced, by the hurdle of rhythm and rhyme, to delay and reconsider.

Statistical analysis is to scientific thought what poetry has sometimes been to philosophic and other thought forms. Statistics are the poetry of science. When we begin to reduce knowledge to statistics, organize it into tables, check and double-check it, and work out relationships, we are doing something remarkably akin to handling the rhythms and rhymes of poetry. For when a tabulated trend seems uniform and then suddenly the next item breaks the pattern, the tabulator, like the poet, must stop. His rhythm is broken. Data must be checked; they may be wrong. If they are right, a reason for the break in pattern must be sought elsewhere. All the components of the erratic figure and all the surrounding data must be examined in detail. The tabulator's fingers must stop and his mind must work. Out of such forced study and speculation, major discoveries rise.

I have known scientists in high position who turn their statistical work over to subordinates and clerks. Few practices are more dangerous. True, some types of research involve such massive data that a team approach and division of statistical labors are inevitable. But it is in the very handling of the statistical detail that one is forced to look at the individual nontypical case, to reconsider columns which add to results other than expected, to critically re-examine previously assumed "facts." The subconscious has time to work its prescient miracles, and science changes in function from dead storage to creativity.

SOME statistics from the Treasury Department that I have lately been playing with may be illustrative, and not too forbidding if we take one simple proposition.

It is widely known that wealthy people give generously to charity. This is our prose "fact." Treasury Department income-tax reports have often been presented in comprehensive proof. For example, the 1,860 persons with incomes of $250,000 or more in 1949 gave to charity a total of $67 million out of adjusted gross income of $955 million, which is obviously at a rate of 7 per cent. Since the general average of giving for the United States is about 2 per cent, obviously . . .

Now it happens that for that particular year the Treasury Department has supplied contribution data not available for any other year—data that show how many persons from given income groups contributed within given ranges. We can embroider our "prose fact" with a number of tables. They may show nothing new, but we are curious.

For simplicity, we develop a tiny table relating to one small group of wealthy people: those reporting ad-

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

justed gross income of $150,000 and less than $200,000 in 1949. Here are the government figures for these 2,658 persons reporting a total of $22 million contributed at a rate of 4.9 per cent.

	Number	%
Total itemized returns	2,658	100
No contributions reported	28	1
Under $600	230	9
$600 under $1,200	258	10
$1,200 under $2,100	319	12
$2,100 under $3,000	237	9
$3,000 under $6,000	404	15
$6,000 under $9,000	255	10
$9,000 under $12,000	175	6
$12,000 under $15,000	153	6
$15,000 under $30,000	599	22

The gross data underlying this table —2,658 persons contributing $22 million out of a reported adjusted gross income of $455 million—supports our "wealthy people give generously" thesis with an overall rate of 4.9 per cent.

But *how many* contributed at or above the 2 per cent general average for all income groups? Here the table is full of surprises. A great number of these wealthy persons made only token charitable contributions. Indeed, twenty-eight of them appear to have made no contributions whatever. And since with an income of at least $150,000 a contribution of at least $3,000 is required to reach even 2 per cent, all of the first five groups in the table (1,072 persons) fall below this rate. A more complicated computation indicates that about 81 of the next group were also giving at a rate of less than 2 per cent.

So, we must radically revise our prose statement, "Wealthy people give generously to charity." For this group (and similar analyses of still higher income groups support the same conclusion) we must now say, "Many wealthy people give very little to charity; about 44 per cent of the sampled group gave less than 2 per cent, although they were in the 90 per cent tax group, in a position to give dollars that cost them only 10 cents."

We need also to look at the rest of the table. Without going into the detailed analysis, it is obvious that the groups in the second segment of the table were giving at intermediate ranges, from a little below 2 per cent up to 10 per cent. Finally, all the 599 persons in the last group gave at least 7.5 per cent, and the large majority of them contributed the full tithe, or more.

So we have another refinement of our first assumption: "A small group of wealthy persons give extremely generously, averaging more than a tenth of their adjusted gross incomes. It is the heavy contributions from this small group that keep up the general average for high-income groups as a whole."

THIS small exercise in statistics, which actually shed new light on one aspect of philanthropy, is presented here as an example of the way statistics often trigger the deeper thinking and fresh formulations which make science creative. With tongue only partly in cheek, one might venture a rash assertion. The creativity is due to the impediments and hesitations introduced by the statistical data, and is not necessarily related to accuracy!

Of course, I think accuracy of the utmost importance. Every possible effort should be made to obtain, and then to check and doublecheck, every relevant fact. Serious error can spring from inaccurate data. But my point is something else.

Science has sometimes been defined as organized knowledge. But creative science springs not so much from a body of organized knowledge (which also is a definition for an encyclopedia) but from the *process* of organizing knowledge. Creativity is a living thing, the result of a process; and the process may be of more importance than the inert factual data with which it must deal.

When we train students, and particularly those who show promise of research capacity, it is not important that we store in their brains the maximum number of previously discovered scientific facts in their chosen discipline. It is important that these students conduct major experiments for themselves, even though the "discoveries" they may make have been made a thousand times before; that they pass through the process of organizing the knowledge in the field of their interest, and be encouraged to explore aspects that are new to them.

In our day it may be more important for race survival to discover the fundamental laws of attraction and repulsion among men and nations than how to make a still more destructive H-bomb. But the social sciences are scarcely science; even the simplest relationships involve interactions that cannot be wholly reduced to precise mathematical formulations. Particularly in such areas, our major discoveries may well come from the infinite correlations that spring from a trained mind delayed and hindered by the inadequacy of data to the point of bringing subconscious appraisals as well as proved statistical data to the threshold of consciousness.

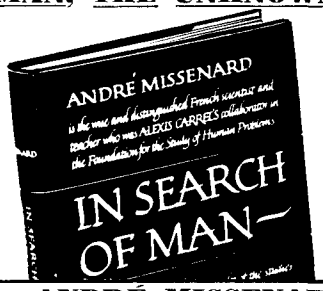
STATISTICS HAVE BEEN THE POETRY of F. Emerson Andrews ever since 1923, when he was graduated from Franklin and Marshall College in his native Lancaster, Pa. Being also the rhyme of philanthropy, statistics bore young Mr. Andrews rather naturally to the Russell Sage Foundation. There he directed philanthropic research from 1928 until last year, when popular ignorance of the values of organized giving prompted America's foundations to document their contribution to democratic society. A study sponsored by the Carnegie Corporation of New York led to the creation of The Foundation Library Center and to Mr. Andrews's appointment as its director. Last December 10 the Center officially opened its doors, making a full collection of foundation reports, additional data on foundation mechanics and grants, and literature on other aspects of philanthropy available to individuals, organizations, universities, the press—in short, to anyone interested. Now in his fifties, of medium height and rather on the lean side, Mr. Andrews talks of his hopes for the Library's expansion with a sense of pride, a touch of modesty and a smile in his eyes. Although his work, as in the past, keeps him very busy, he still finds time for "informal" mountain climbing, tennis and writing. He is the author of a dozen books on subjects ranging from philanthropy (*The New York Times* called his "Philanthropic Giving" "the most comprehensive study in philanthropy ever undertaken in this country") to mathematics (his "New Numbers" concerned counting by twelves and resulted in formation of the Duodecimal Society of America) and entertainment for children (the latest of these volumes, "Upside Down Town," is, like the earlier ones, drawn from a background provided by his own three sons, all at the moment in college). Known among his neighbors in Tenafly, New Jersey, as a skilled statistician and a poet of sorts, Mr. Andrews here discusses the poetry of science. —NAOMI WEBER.

—*Foundation Library Center.*

F. Emerson Andrews.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The monumental continuation of
ALEXIS CARREL'S MAN, THE UNKNOWN



by ANDRÉ MISSENARD

The famous French scientist and teacher presents for the first time the results of studies by Dr. Carrel and himself of the effect of heredity, environment and spiritual forces on the formation of man's personality and the society in which he exists. Not since MAN, THE UNKNOWN has so wise and challenging a work been published. Illustrated. $5.95

HAWTHORN BOOKS, INC.
70 Fifth Avenue, N.Y. 11

5™ *Anniversary*

AUTHORS WANTED BY N. Y. PUBLISHER

New York, N. Y.—This company is now in the market for manuscripts of all types—fiction, non-fiction, poetry. Special attention to new writers. If your work is ready for publication, send for booklet No. 71—*it's free.* Vantage Press, 120 W. 31st St., New York 1.

COMING OCTOBER 19TH

Europe: The Winter Cities

A memorable portfolio in words and pictures of the Continent's leading cosmopolitan centers.

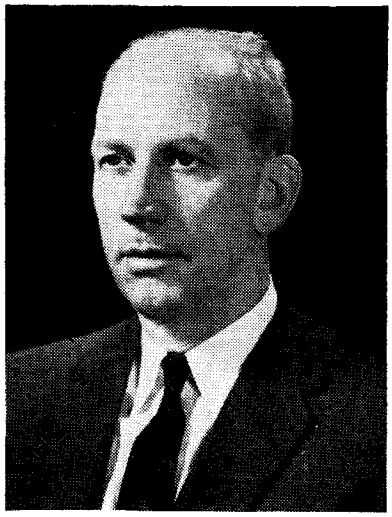
Their excitement, culture and glamor caught by prominent writers who know them well.

Saturday Review's Fall Travel Issue An important bonus issue for *SR* readers whether subscribers or newsstand buyers.

PERSONALITY PORTRAIT—XIX

ACHELESS TOOTH PROPHET

Professor Roy Orval Greep Says Decay Is Preventable



—*Harvard News Office.*

ALTHOUGH American dentists are the best in the world, nearly all Americans have tooth trouble. As the population increases, and a higher percentage of the people seek dental care, it will become more difficult to make a date with a dentist. The colleges cannot produce enough of them. The alternative to increasing the number of dentists is to improve the quality of dentistry, and this is the goal of Dr. Roy Orval Greep.

Dr. Greep is a member of a long list of professional and scientific societies, chairman of the Committee on Dentistry of the Division of Medical Sciences of the National Research Council, and editor of one of the nation's leading scientific journals—*Endocrinology*. He never expected to become a dentist, and has never practised dentistry. He is dean, nevertheless, of the Harvard School of Dental Medicine.

Now in his early fifties, a father of three, Dr. Greep is a tall, blond man who speaks slowly and diffidently. New friends are surprised by his wry sense of humor; old friends respect him for his scholarly research—and also recall the near-beer that he spiked at a graduate-student picnic. He writes on such topics as "the morphological autonomy of the zona glomerulosa of the adrenal cortex in the rhesus monkey," but could easily be mistaken by the panelists on "What's My Line" for a Kansas farmer.

His unplanned academic career began in a one-room country schoolhouse near Badger Creek, eighteen miles north of Abilene, Kansas. He is now an honorary fellow of the Obstetrical Society of Boston, but he was born in a farmhouse at Longford without obstetrical aid. His schooling was interrupted for three years by farm work. He was captain of a basketball team that terrorized its territory while he was in high school, and his teachers encouraged him to think of becoming a newspaperman.

Now he is doing work which the newspapers have trouble interpreting. It includes, for example, studies of the action of hormones in vertebrates. A growth hormone taken from the pituitary glands of cattle will induce growth in various animals, but not in man. Thousands of tiny glands from monkeys that were being used to produce polio vaccine recently became available. Dr. Greep and his associates took growth hormone from these glands. They injected this into monkeys whose growth had been interrupted and the monkeys began to grow again. This inspired others to see what could be done with growth hormone from monkey and human sources in man.

What does this have to do with teeth? Maybe nothing. No one knows. But the growth of teeth is a phase of the growth of the human body, and better understanding of the phenomenon of growth could help to explain how teeth grow.

In any event, Dr. Greep is professor of anatomy at the Harvard Medical School in addition to being dean of Dental Medicine. He is not just interested in teeth. In this respect he is merely continuing the study of glands and secretions which he began in a general science course at Kansas State College. And he is still as fascinated by the subject as he was when, as an undergraduate assistant in zoology, he cheerfully hauled tubs of cow urine from the college farm to the chemistry laboratory.

At the University of Wisconsin (where he earned his master's degree and doctorate) Roy Greep mastered the surgical skill necessary to remove the pituitary gland from a rat. He went on to Harvard with a team of scientists who were studying pituitary substance. After serving as a research

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

assistant and instructor in zoology there, he became an associate in pharmacology at the Squibb Institute for Medical Research in New Brunswick, New Jersey, in 1938, continuing his work in endocrinology.

Dr. Greep took the pituitary glands out of about 20,000 rats during those years—and one of those rats led him into the ranks of dental educators.

To hold each rat's head in place for the surgery, he usually put a rubber band around his operating board and inserted it into the rat's mouth. The band kept slipping out of one rat's mouth. Dr. Greep peered into this rat's mouth. It had no teeth. So he saved this rat, bred it, and produced a strain of toothless rats.

This intensified his curiosity about the way that the body forms such intricate and difficult-to-replace parts as teeth. Although often regarded as though they were inanimate objects, the teeth are unique and challenging biological structures. There are no cells, nerves or blood vessels where decay begins. The dynamic and metabolic relationships between the teeth and the rest of the body still are not well understood. The toothless rat prompted Dr. Greep to think a great deal about the mysteries in the oral cavity.

ABOUT that same time, President James Bryant Conant of Harvard was taking a hard look at the dental profession. He noted that it was a medical specialty which could be entered without first studying medicine, that more basic research regarding dentistry was needed, and that few dentists were qualified to tackle such problems as Dr. Greep and others had encountered.

Dr. Conant concluded that it was futile merely to go on trying to train enough men to fill the cavities, build bridges, and otherwise compensate for the deterioration of people's teeth. So, in 1940, he shocked alumni and leaders of the dental profession by closing the Harvard Dental School and dismissing most of its staff.

To replace it, Dr. Conant created a School of Dental Medicine which was clearly a satellite of the Harvard Medical School. To enter this school, a young man had to be fully qualified for admission to the medical school and also have the special qualities needed for proficiency in dentistry. There was seldom a full class. Nevertheless, Harvard recruited during those years a faculty of men who were interested in increasing knowledge of the teeth, as well as in repairing them, and in evaluating such knowledge and applying it to the treatment of patients.

This faculty is now nearly as large as the student body. Dr. Greep joined it as an assistant professor in 1944, and also became a teaching fellow in anatomy and lecturer in endocrinology in the Harvard Medical School. He became a professor in 1949, and was made dean three years later.

On one floor of his school, Dean Greep can show you the usual rows of spotless dental chairs for clinical practice, and all of the latest tools of the practitioner. On another floor, you will find an electron microscope and the radiation counters and shielding needed for work with radioactive isotopes. Here, too, you will find room after room full of rats, hamsters, baby chicks and rhesus monkeys.

You may see students operating on animals which seldom have toothaches. You may also see a stack of cages of rodents called gerbils, that are especially subject to periodontal disease. You may even be taken into one tiny, tidy operating room and shown the only chair in the world that was especially tailored and built for dental work on monkeys.

"We are on hard ground," Dean Greep is likely to explain while showing a visitor these facilities. "We are on the biochemical, physiological, anatomical levels, looking at basic structure and bacterial effects in the oral cavity.

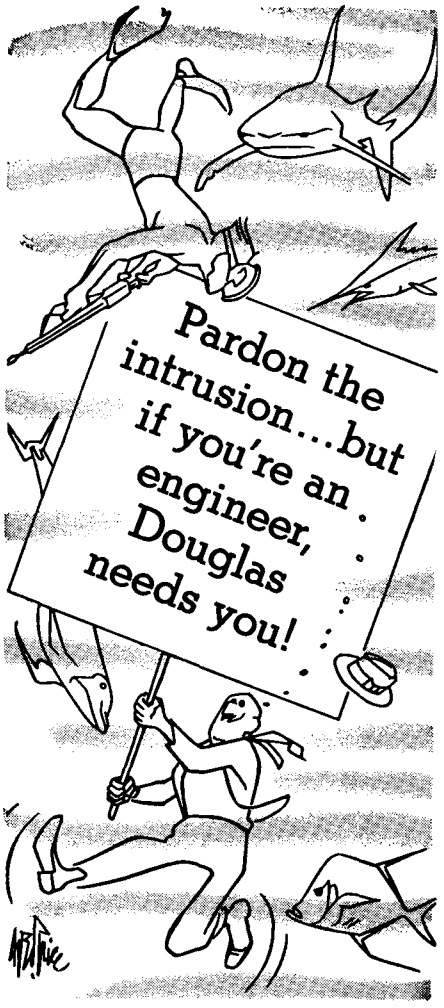
"We must understand what causes the diseases to which our teeth and their supporting tissues fall prey if the diseases are to be prevented. It is this philosophy of prevention that is followed today in essentially every avenue of public health.

"It has become increasingly evident that tooth restoration alone is an inadequate measure. The answer to the dental problem still clearly lies in prevention."

The medical profession's leaders in its recent period of rapid development were men in strategic centers of learning, who were familiar with the problems of caring for patients, research and teaching. Under Dean Greep's leadership, Harvard is striving to produce similar leaders for the dental profession and to create an equally favorable environment for them. This fall a three-year postdoctoral study program is being launched to prepare young dental graduates for careers in academic dentistry.

Research of the sort that Dr. Greep, his faculty and his students have undertaken may not only reduce the frequency of our trips to the dentist's office but also add to the pool of knowledge from which our physicians are benefitting. The inadequacies of that pool led Dr. Greep to his post in Boston—and possibly account for many of our toothaches.

—VOLTA TORREY.



Do you know what *your depth* really is?

A lot of engineers never get the chance to find out. But at Douglas, we give you the ocean to test your talents.

We think you'll find the kind of challenge you're looking for among the many exciting — and still classified — projects at Douglas.

And the great engineering minds at work at Douglas will help you to get the most out of your talents.

Tell us "your dreams" and we'll try to help you make 'em come true. We're located on both coasts and a good many places in between.

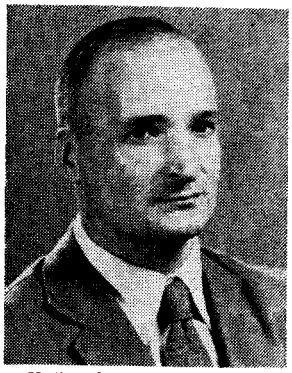
Please write for complete information to:

C. C. LaVENE
DOUGLAS AIRCRAFT COMPANY
BOX 620-S
SANTA MONICA, CALIFORNIA

Go further with **DOUGLAS**

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE RESEARCH FRONTIER



—National Bureau of Standards (Boulder).

WHERE IS SCIENCE TAKING US? *To escape Earth's atmosphere and free himself to explore the neighboring planets, man must travel at speeds beyond even remote approximation in his past experience. What happens at such speeds he can do no better than guess, and his closest guesses must come from watching streaks of light in the sky at night. Only meteors hurtle the empty vastness future spaceships will traverse. Can man copy, or perhaps improve upon, their durable characteristics? On this almost limitless frontier of research the Smithsonian Institution, with financial help from the National Science Foundation, has assembled scientists from many disciplines. The result is the new science of astroballistics.*

RICHARD N. THOMAS
(National Bureau of Standards, Boulder, Colorado.)

The motion of planets and planetoids has been for years a conventional part of study in astronomy. However, we can hardly claim a satisfactory knowledge of our planetary system until we can also specify the properties of those objects so small that they cannot be observed individually. In general, our information on these objects is wholly statistical, coming from such studies as their collective scattering effect on sunlight. One notable exception is the study of meteors; for these, the earth serves as a sampling box, sweeping up the interplanetary material, with the earth's atmosphere fluorescing in response to the entrance of each meteor.

If we completely understood all the processes that occur when a solid object moves through a gaseous atmosphere, we would have a fine method for inferring the corresponding properties of each meteor observed. We do not yet have such an understanding, however, and the science of astroballistics has arisen from our attempts to remedy this lack.

Astroballistics was conceived on the common borders of astronomy, aerodynamics, ballistics, and chemical reaction-kinetics (speed at which chemical reactions occur). Its multiple origin exhibits the trend which is changing astronomy from a wholly observational and theoretical science to one demanding extensive laboratory investigations.

Astroballistics considers the meteor only as a solid object moving through a gaseous atmosphere. When a solid moves through a gas, several things may happen. The solid loses momentum to the gas and is decelerated. The amount of deceleration depends critically upon the mass, shape, and velocity of the body, and upon the composition and thermodynamic state of the gas. The solid loses energy as it decelerates, and the energy contributes heat to both body and gas. The partition of heat between the two depends critically upon the velocity, shape, composition, surface structure, and thermodynamic state of the body, and upon the composition and thermodynamic state of the gas. The heat transfer to the solid may result in thermal radiation and ablation (either by melting or by vaporization) from the surface, as well as in a simple temperature rise throughout the interior. The heat transfer to the gas may result in excitation and ionization, and thus in radiation, if the temperature rises sufficiently. Moreover, the material ablated from the solid may interact chemically with the gaseous atmosphere.

The astronomer can make at least three types of measures on a meteor moving through the atmosphere: (1) He can measure directly time and position, and so obtain velocity and deceleration: (2) he can measure the total radiation, and possibly its spectral distribution; and (3) by radar, he can infer the ionization produced by the meteor. Ideally, he would like to have available a set of tables which he could enter with these data, and so read off the physical characteristics of a single body which alone could have produced such a disturbance. At worst, he might expect to obtain a range of such bodies, and this range would represent his uncertainty of the properties of the particular meteor observed. These properties he could compare with those rare meteors which have survived passage through the atmosphere, and been recovered as meteorites.

Unfortunately, when we attempt to prepare such a set of tables, we find a disheartening situation. Meteors impact on the earth's outer atmosphere at speeds ranging between 10 and 75 kilometers (6.25 and 40.6 miles) per second. Only during the war did the aerodynamicist develop a keen interest in speeds as high as that of sound, about ⅓ km per sec. While the ballistician customarily dealt with speeds several times that of sound, his empirical investigations were limited by his accelerating devices. The experimental investigations reported in the unclassified literature do not deal with objects of known geometry whose speed exceeds about 2 km per sec. Ballistic and aerodynamic studies of objects moving at such high speeds that ablation occurs are virtually nonexistent. From a theoretical standpoint, the situation is equally bad. The study of the aerodynamic flow pattern about a body that is losing mass at its leading surface has hardly been discussed. When we consider the data available on excitation and ionization caused by the ablated material ejected into the gaseous atmosphere, we find the bleakest situation of all.

To categorize and collate the variety of problems just described, the science of astroballistics developed. Its province includes the study of those phenomena arising out of the motion of a solid through a gas at such speeds that ablation occurs. A certain amount of development of new launching devices and considerable improvement of the old, plus the use of low melting-point materials, together have made it possible to simulate ablation from meteors. Newly developed free-flight firing ranges permit studies under varying conditions of the atmosphere through which the solid moves. Advances in high-speed photography allow us to make inferences of the spectral distribution of luminosity along the axis and trail of an artificial meteor, which we have been able to accelerate up to speeds of 6 km per sec. These first spectral observations, though crude, demonstrate that it is possible to observe details of the chemical reactions involving ablated material and atmospheric atoms. Observations of actual meteors have never provided such data. Thus we have an approach to an aerodynamic flow problem of exciting possibilities.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SCIENCE IN BOOKS

HOW FLOWERS CHANGED THE WORLD

Angiosperms Give Energy, Energy Gives Warmth. Without It Man Would Not Exist

IF IT had been possible to observe the Earth from the far side of the solar system over the long course of geological epochs, the watchers might have been able to observe a subtle change in the light emanating from our planet. That world of long ago would, like the red deserts of Mars, have reflected light from vast drifts of stone and gravel, the sands of wandering wastes, the blackness of naked basalt, the yellow dust of endlessly moving storms. Only the ceaseless marching of the clouds and the intermittent flashes from the restless surface of the sea would have told a different story, but still essentially a barren one. Then, as the millennia rolled away and age followed age, a new and greener light would, by degrees, have come to twinkle across those endless miles.

This is the only difference those far watchers, by the use of subtle instruments, might have perceived in the whole history of the planet Earth. Yet that slowly growing green twinkle would have contained the epic march of life from the tidal oozes upward across the raw and unclothed continents. Out of the vast chemical bath of the sea—not from the deeps, but from the element-rich, light-exposed platforms of the continental shelves—wandering fingers of green had crept upward along the meanderings of river systems and fringed the gravels of forgotten lakes.

In those first ages plants clung of necessity to swamps and watercourses. Their reproductive processes demanded direct access to water. Beyond the primitive ferns and mosses that enclosed the borders of swamps and streams the rocks still lay vast and bare, the winds still swirled the dust of a naked planet. The grass cover that holds our world secure in place was still millions of years in the future. The green marchers had gained a soggy foothold upon the land, but that was all. They did not reproduce by seeds but by microscopic swimming sperm that had to wriggle their way through water to fertilize the female cell. Wherever one might have looked, from the poles to the equator one would have seen only the cold dark monotonous green of a world whose plant life possessed no other color.

Somewhere, just a short time before the close of the Age of Reptiles—about one hundred million years ago, as the geologist estimates time in the history of our four-billion-year-old planet—there occurred a soundless, violent explosion. It lasted millions of years. It was the emergence of the angiosperms ("encased seeds"), the flowering plants. Even the great evolutionist, Charles Darwin, called them "an abominable mystery," because they appeared so suddenly and spread so fast.

The first simple flower was a very inconspicuous flower because it had not yet evolved the idea of using the surer attraction of birds and insects to achieve the transportation of pollen. When it bloomed on some raw upland late in the Dinosaur Age, it was wind pollinated, just like its early pine-cone relatives. Nevertheless, the flower was a profound innovation in the world of life. It grew a seed in its heart, a seed whose development was initiated by a fertilizing pollen grain independent of outside moisture. Unlike the developing spore, the seed was already a fully equipped *embryonic plant* packed in a little enclosed box stuffed full of nutritious food. Moreover, by feather-down attachments, as in dandelion or milkweed seed, it could be wafted upward on gusts and ride the wind for miles; or with hooks it could cling to a bear's or a rabbit's hide; or like some of the berries, it could be covered with a juicy, attractive fruit to lure birds, pass undigested through their intestinal tracts and be voided miles away.

The ramifications of this biological invention were endless. Plants traveled as they had never traveled before. They got into strange environments theretofore never entered by the old spore plants or stiff pine-cone-seed plants. The well-fed, carefully cherished little embryos raised their heads everywhere. These fantastic little seeds . . . flying about the woods and valleys brought with them an amazing adaptability.

Judged by modern standards, the world in which flowers first appeared was a world in slow motion, a cold-blooded world whose occupants were most active at noonday but torpid on chill nights, their brains damped by a slower metabolism than any known to even the most primitive of warm-blooded animals today. A high metabolic rate and the maintenance of a constant body temperature are supreme achievements in the evolution of life. A high metabolic rate, however, means a heavy intake of energy in order to sustain body warmth and efficiency. The agile brain of the warm-blooded birds and mammals demands a high oxygen consumption and food in concentrated forms, or the creatures cannot long sustain themselves. It was the rise of the flowering plants that provided that energy. Without them, the world we know—even man himself—would never have existed.

—LOREN EISELEY *in "The Immense Journey" (Copyright © 1957 by Loren Eiseley. Random House, $3.50).*

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LETTERS TO THE SCIENCE EDITOR

SCIENCE FOR THE SCIENTIST

MR. W. FURNESS THOMPSON in his article "Why Don't the Scientists Admit They're Human?" (*SR/*RESEARCH, Sept. 7) points out problems arising from scientific writing. There are problems. But one of them is not that "scientists promulgate the curious notion that science is infallible." This statement comes from a mistaken assumption. . . . Is it likely that the truck driver or factory worker spends his noon hour reading *Science* or *The Journal of Neurology*? No, the image of science and the scientist given by the press, radio, TV, and the movies is the source of the layman's image.

Nor does scientific writing "misrepresent the workings of science." It is not meant to represent it. We might as well ask of a novel that it represent the workings of the novelists' mind in addition to its observations and descriptions. . . . No, scientific journals are for the presentation of research findings. The scientists who read them know the workings of science in their own experience. They don't need to be told. The layman does. It is for the mass media to present science and the scientist as living, fallible, and interesting.

Yet there is a problem created by scientific writing. It is the problem of confusion that comes from writing fat with "say nothing" words, long words and wrong words. . . . A diet of Quiller Couch, Shakespeare and the King James Version might reduce the weight of many a scientist's writing. This weight loss would be a real benefit to the health of science.

DAVID ELKIND, PH.D.
Clinical Psychologist,
Beth Israel Hospital.

Boston, Mass.

INFORMATION, NOT LITERATURE

BEING A scientist of sorts, I feel obliged to defend the "hypocritical" scientific writing of which Mr. Thompson disapproves. Scientific writing has only one purpose in mind, to convey information in the clearest, most accurate manner possible. . . . Thus necessity, stemming from vast amounts of material that a scientist needs to assimilate while pursuing his own work, must substitute for personal literary preferences.

JACQUELINE ST. CLAIR,
Genetics Department,
University of Wisconsin.

Madison, Wis.

WHO READS THE JOURNALS?

MR. W. FURNESS THOMPSON asks, "Did you ever read a scientific paper that begins, 'For no good reason at all I had a hunch that . . .?' No sir!" Have you, gentle reader, ever read the published report of *any* research experiment? Research administrators do, but with very few other exceptions, the answer is once again a resounding "no." . . .

Not only do these reports never start with "I had a hunch . . .," but they are often so uncompromisingly technical that only a handful of people in the entire world can read them intelligently. These are people working in the same field, and they are precisely the ones that the article is intended for. . . .

For most scientists at present, writing the report is the most laborious part of the job. They feel their inadequacies in this respect. . . . The standard, impersonal form of the research report is the . . . easiest way out. It assures him that the truth will be put down and be intelligible to those studying his field. Indeed, if most scientists tried to "humanize" their reports, the niceties of language would obscure what they were trying to say, and at the same time they would spend more of their time at the typewriter and less in the laboratory.

J. J. BURKE,
Assistant Editor,
Journal of Metals.

New York, N. Y.

FIXED SYMBOLS

IN MR. W. F. THOMPSON'S article . . . there is not only naivete, but also incoherence. I cannot determine the nature of his criticisms. If he is criticising *how* the scientist issues reports, then there is an easy answer because once established as a fact, a concept or principle is universally understood best by concise standard symbolic representation such as NaCl, or Dexedrine rather than "happiness or reducing pill."

If Mr. Thompson is criticising *what* the scientist reports then I am positive from his own illustrations that even *SR*, which is publishing Thompson's article of criticism, would not publish a concept of science which was not established in fact, which represented the idea of a single individual or small minority, or which was so revolutionarily deviant from accepted concept.

SAM I. STEIN, M.D.
Neuropsychiatric Research
Program, Inc.

Chicago, Ill.

RIGOROUS METHOD

W. FURNESS THOMPSON . . . seems to have missed the true import of scientific research entirely. . . . When a scientist makes a report he is trying to communicate a new conclusion or phenomenon. More importantly, he is trying to communicate a rigorous method by which any other researcher familiar with the field may reproduce the same results, regardless of time or place. The scientist is not attempting to report his own behavior. . . . Subjective, or popular, modes of expression are a detriment to . . . (his) goals.

EDWARD G. DILLON.

Coronado, Calif.

BEYOND UNDERSTANDING

BECAUSE MR. THOMPSON seems so totally unsympathetic to the philosophy of science generally accepted by scientists, I cannot understand why he is the vice-head of a scientific research organization. If I were a research scientist, I would not relish working under him.

HARRY KERASTAS.

Detroit, Mich.

EDITOR'S NOTE: *While it is probably true that few laymen read scientific journals and consequently are not directly affected one way or another by their stilted style and artificial format, journals are read by popularizers who must do the best they can to humanize the robotlike mumbo-jumbo; the result sometimes is distortion which the scientist reads and screams protest against. But this is missing Mr. Thompson's main point—that reports of experiments, from which all the human quality has been strained, discourage potential young scientists who certainly must read the technical journals in order to be anything more than classroom hacks. Mr. Thompson did not advocate any change in experimental method, nor any lessening of standards. And he stated specifically that it would be unreasonable to expect any attempt at literary style; he proposed only a* clear, simple exposition of the whole story *of an experiment. Unless the creative impulse can be conveyed, discipline is empty phrasing. The U. S. Navy is distributing his observations to all Navy scientists in the conviction that they "can learn much from this." Below, several other kudos for Mr. Thompson.*

IT CAN BE DONE

"STRIKE THREE!" for the pitches of W. Furness Thompson. But in . . . (the scientists') defense (as if they needed it!) may I suggest the wonderful report of research by Hans Selye, Ph.D., in "The Stress of Life." . . . Not only does he admit his errors and weaknesses, he even goes so far as to expose raw flesh which is admittedly terrified of censure by adding a final chapter of "Philosophic Implications" of his research. "Greater love hath no man," scientist or other.

KEN DOHERTY.

Swarthmore, Pa.

HOORAY FOR EVOLUTION!

THANKS FOR the breath of fresh air supplied by W. Furness Thompson's article. . . . I appreciated the candor and wisdom he brought to bear on the art of technical expression, being myself on the receiving end of a steady procession of scientific periodicals to which our lab subscribes.

Men striking the pose of pure thinking machines look about as ridiculous as those who behave like bipedal generative organs or digestive tracts. Any trend to dehumanize man, whether intentional or not, is a step toward desensitizing and quenching his unique warm integrated human qualities. So far, these qualities have led man up the evolutionary ladder and have been as a ratchet to the backsliding tendency toward the brute whom you will find congregating near either pole—whether of the all-cerebral man or the all-visceral man.

SOL KORT,
Kent Chemicals Ltd.

Vancouver, British Columbia.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

PRINTED IN THE U. S. A. BY THE CUNEO PRESS, INC.

KINGSLEY DOUBLE-CROSTIC NO. 1228

Reg. U.S. Patent Office

By Doris Nash Wortman

DEFINITIONS	WORDS
A. Prickly, like a hedgehog.	78 38 44 139 110 165 26 8
B. Analytical; making distinctions.	168 68 133 20 172 109 48 164
C. Gorgeousness; flamboyance.	14 178 118 112 70 146 97 163 54
D. Always in debt (comp.).	5 138 148 46 74 62 151 119 19
E. Play with longest run on record, in New York (full title).	115 37 85 137 63 58 173 2 90 93 69
	102 158 135
F. Center of London's newspaper district (2 wds.; like our "Times Square," former "Park Row," etc.).	72 16 49 45 76 116 160 121 30 67 124
G. English title of Demosthenes' famous "model" speech, *Peri Stephanou* (3 wds.).	117 23 152 157 105 143 34 17 128 167
H. Heroine who lived at Manderley.	73 28 6 170 92 176 166
I. Small dwelling on large British estates, usually considered the wife's special property (2 wds.).	136 84 11 181 104 64 120 175 159 132
J. Exclamation expressing dejection, weariness, etc. (comp.).	77 7 47 99 144 83 140

DEFINITIONS	WORDS
K. Type of person intermediate bet. the one too indrawn and the over-exuberant.	10 180 32 91 96 162 51 57
L. What Omar found for his "Door" (2 wds.).	87 25 59 95 42
M. Intentional variation or deviation of color in Oriental rugs.	108 79 98 3 142 36
N. Not indicated or illustrated on a map, in a book, etc.	52 18 71 129 179 35 24
O. "Yanqui."	145 31 134 66 113 21 155 94 61
P. A building used for worship.	75 125 33 101 111 9 107 81 174 56 169
	65
Q. Chinese general, a Moslem, who opposed Japanese in Manchuria, etc. (1887-1950; full name).	29 41 156 39 171 60 150 161 80 53
R. Open subsurface entrance to basement.	86 27 154 123 40 12 127
S. Scene of decisive victory of Huguenots under Henry IV, March 14, 1590 (comp.).	1 4 153 13 149 22 55 130 43 106 89
	114 122 103
T. With one's back to the south.	82 15 50 131 177 126 100 141 147 88

DIRECTIONS

To solve this puzzle you must guess twenty-odd WORDS, the definitions of which are given in the column headed DEFINITIONS. Alongside each definition, there is a row of dashes—one for each letter in the required word. When you have guessed a word, write it on the dashes, and also write each letter in the correspondingly numbered square of the puzzle diagram. . . . When the squares are all filled in, you will find that you have completed a quotation from some published work. If read up and down, the letters in the diagram have no meaning. . . . Black squares indicate ends of words; if there is no black square at the right side of the diagram, the word carries over to the next line. . . . When all the WORDS are filled in, their initial letters spell the name of the author and the title of the piece from which the quotation has been taken. Of great help to the solver are this acrostic feature and the relative shapes of words in the diagram as they develop. Authority for spellings and definitions is Webster's New International Dictionary, Second Edition.

					1 S		2 E	3 M	4 S	5 D		6 H	7 J	8 A	9 P			
10 K	11 I	12 R	13 S		14 C	15 T		16 F	17 G	18 N	19 D		20 B		21 O	22 S		
23 G	24 N	25 L	26 A		27 R	28 H	29 Q	30 F	31 O	32 K	33 P	34 G		35 N	36 M	37 E		
38 A	39 Q		40 R	41 Q	42 L		43 S	44 A	45 F		46 D	47 J	48 B	49 F	50 T			
51 K	52 N	53 Q	54 C		55 S	56 P	57 K		58 E		59 L	60 Q	61 O	62 D		63 E		
64 I	65 P	66 O	67 F		68 B	69 E		70 C	71 N		72 F	73 H	74 D	75 P		76 F		
77 J	78 A		79 M	80 Q	81 P	82 T	83 J	84 I	85 E		86 R	87 L	88 T		89 S	90 E		
	91 K		92 H	93 E	94 O		95 L	96 K	97 C	98 M		99 J	100 T		101 P	102 E		
103 S	104 I	105 G		106 S	107 P	108 M	109 B	110 A		111 P		112 C	113 O	114 S	115 E			
116 F	117 G	118 C	119 D		120 I	121 F		122 S	123 R	124 F	125 P		126 T	127 R		128 G		
129 N	130 S	131 T	132 I	133 B	134 O	135 E		136 I	137 E	138 D	139 A	140 J	141 T	142 M		143 G		
144 J	145 O	146 C	147 T	148 D	149 S	150 Q		151 D	152 G		153 S	154 R	155 O	156 Q	157 G	158 E		
159 I		160 F	161 Q	162 K		163 C	164 B	165 A		166 H	167 G	168 B		169 P	170 H	171 Q		
172 B		173 E	174 P	175 I	176 H	177 T		178 C	179 N	180 K	181 I							

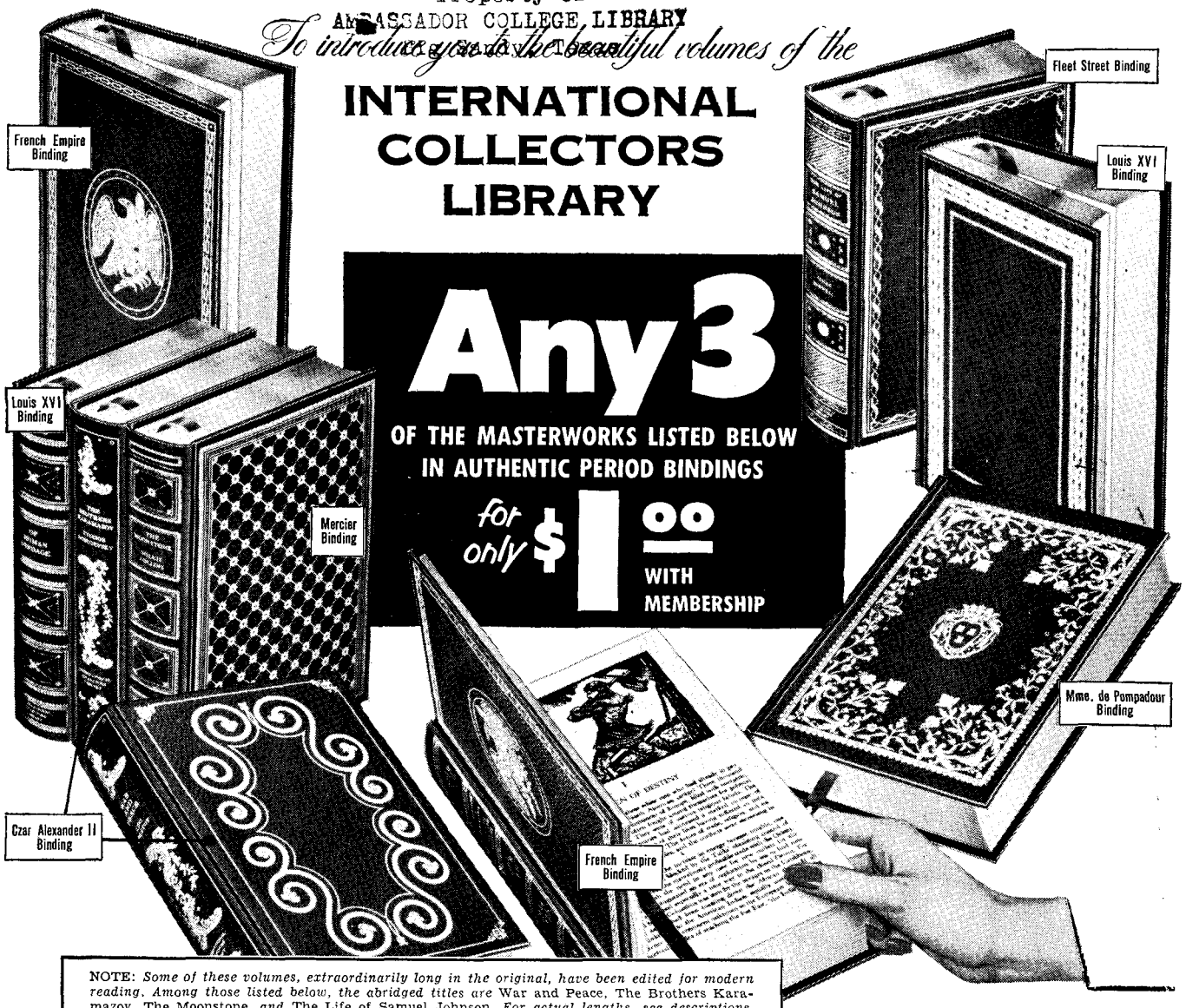
Solution of last week's Double-Crostic will be found on page 7 of this issue.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Property of
AMBASSADOR COLLEGE, LIBRARY

To introduce you to the beautiful volumes of the

INTERNATIONAL COLLECTORS LIBRARY



Any 3

OF THE MASTERWORKS LISTED BELOW IN AUTHENTIC PERIOD BINDINGS

for only **$1.00** **WITH MEMBERSHIP**

NOTE: *Some of these volumes, extraordinarily long in the original, have been edited for modern reading. Among those listed below, the abridged titles are* War and Peace, The Brothers Karamazov, The Moonstone, *and* The Life of Samuel Johnson. *For actual lengths, see descriptions.*

THE great private libraries of the past have bequeathed to us rare and sumptuous volumes of exquisite, hand-crafted design. These volumes are today priceless treasures found only in museums and in the libraries of the wealthy. Yet — on the most limited budget, you may have thrilling reproductions commissioned by the International Collectors Library!

A MAGNIFICENT LIFETIME LIBRARY FOR YOUR HOME. Within the exclusive, luxurious bindings of the International Collectors Library are the greatest works of literature — novels, drama, philosophy, biography, history — some of which, extraordinarily long in the original, have been edited for modern reading. Each binding reproduces the coloring and design of the original, and is elaborately embossed in 24K gold, to enrich your home. The paper was made to last for centuries, and the page tops gleam with genuine gold leaf. Each volume has its own silk marker.

HOW THE LIBRARY'S PLAN WORKS. The Library distributes these volumes *to members only* for just $3.65 each. You will receive an advance notice each month of the forthcoming release. If you do not want it, simply notify us and it will not be sent; otherwise, it will come to you for only $3.65 plus small delivery charge. Your sole obligation is to accept as few as four selections in any twelve-month period, after which you may resign at any time.

MAIL THE COUPON TODAY! Send for your *three* volumes for free examination. If you are not overwhelmed by their beauty and value, return them in 7 days and owe nothing. Or, pay only $1.00 (plus shipping) for all three and become a Library member. Remember — you may cancel membership at any time after accepting four more books. So — mail the coupon *now!*

INTERNATIONAL COLLECTORS LIBRARY, Garden City, N. Y.

Write Below the TITLES of the Three Volumes You Want For Just $1.00

_____

_____

_____

International Collectors Library, Dept. 10-SRL
Garden City, N. Y.

Please send me the three International Collectors Library volumes, the titles of which I have written above, and bill me only $1.00 (plus few cents shipping) for all three. Enroll me as a member of the International Collectors Library and send me each month an advance description of the forthcoming selection which I may accept or reject as I choose. I may take as few as four additional volumes during the coming twelve months at the exclusive price of just $3.65 each, plus delivery charge—and I may resign membership at any time after doing so simply by notifying you.

SPECIAL NO-RISK GUARANTEE: If not delighted I will return all books in 7 days and this membership will be cancelled!

Name .....

Address .....

City ..... **Zone** .... **State** .....

CHOOSE THE 3 VOLUMES YOU WANT FOR $1.00

(Each Title Available Only in Binding Indicated)

FRENCH EMPIRE BINDING. A rich, elegant binding in mellow tan, decorated with Napoleonic eagle and chain-link design.

The History of Herodotus. A vivid picture of life in the ancient world. *Complete.*

The Epic of America *by James Truslow Adams.* An inspired interpretation of our country's history. *Complete.*

LOUIS XVI BINDING. A superb, brilliant green with an exquisite design found in the magnificent library of Louis XVI of France.

Of Human Bondage *by W. Somerset Maugham.* A study of love and hate, man and woman. *Complete.*

Victory. *Joseph Conrad's* strange and fiery novel about a good man and a lost woman on a paradise isle. *Complete.*

MERCIER BINDING. In rich blue, with an unusual design created by Emile Mercier, master French bookbinder of the 19th Century.

The Moonstone *by Wilkie Collins.* The first detective novel! *Abridged to 444 pages.*

MME. DE POMPADOUR BINDING. An elaborate binding in antique brown with a design from the library of Mme. de Pompadour.

Madame Bovary *by Gustave Flaubert.* A portrait of a marriage and the disintegration of a woman's character. *Complete.*

FLEET STREET BINDING. A binding in soft burnt-orange, with a design by the famous London craftsman, Kyle of Fleet Street.

The Life of Samuel Johnson *by James Boswell.* The brilliant, witty Doctor lives forever in this — the world's greatest biography! *Abridged to 631 pages.*

CZAR ALEXANDER II BINDING. A wine-red ornate binding originally discovered in the Imperial Russian Palace library.

The Brothers Karamazov *by Fyodor Dostoevsky.* Called the world's most masterful novel. *Kropotkin translation. Abridged to 483 pages.*

War and Peace *by Count Leo Tolstoy.* The world-famous epic masterpiece. *Kropotkin translation. Abridged to 741 pages.*

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED